Saving Turtles; rehabilitating practices and enactments

The entangled lives of sea turtles and people in a turtle conservation organisation in Far Northern Queensland, Australia.

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Abstract

This thesis explores encounters between humans and sea turtles. Based on six months fieldwork in Cairns, Far Northern Queensland, Australia, my ethnography revolves around Saving Turtles[1], an environmental organisation that works to rehabilitate sick and injured sea turtles in two *turtle rehab-centres*; improvised, yet sturdy and well functioning hospitals built for sea turtles. I discuss how sea turtles emerge differentially through the nexus of practices that connects to this organisation, where turtles and people meet and entangle in different ways. I show how sea turtles are enacted as a threatened group of animals through pictures and texts deployed in the environmental movement, and argue that this creates conditions for the work carried out by Saving Turtles. I then focus on practices within this organisation's rehab-centres and show how different sea turtle ontologies are produced out of the caring-practices in which they take part. Furthermore, I argue that when turtles are successfully rehabilitated and released into the sea, this enacts wilderness-nature as a particular ontology that hinges on a clear separation between nature and culture. By focusing on the nexus of practices that go into rehabilitating turtles, my aim is to use empirical descriptions as a kind of onto-political interference, against seeing the natural world as given and inert or ontologies as fixed. Lastly, I briefly discuss how aboriginal hunting of sea turtles challenges the enactment of wilderness-nature and opens up for seeing how realities can always be done differently.

1 Saving Turtles is the anonymised name I have given to the organisation I involved myself. All the people in this organisation have likewise been anonymised.

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To the people in Saving Turtles; thank you! You have kindly granted me access to the exciting world of turtle-rehabilitation. I am deeply grateful for what you have taught me and for the friends I take with me. Without the inspirational and important work you do, this thesis would not have been possible. I would also like to express a deep appreciation to my supervisor Knut Nustad, who has given me invaluable advice and at times necessary motivation in the process of writing this thesis. Lastly, I would like to thank my fellow master students for their friendship and help throughout the writing period.

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Chapter 1: Introducing the entangled lives of sea turtles and people in Saving Turtles

As Liz, Betty and I arrive on the island with the morning ferry, Sarah waves at us from the jetty. It is an early morning in the tropical rain-season near the city of Cairns in Far Northern Queensland Australia. While heavy clouds hover in the horizon near land, out on Fitzroy Island, the occasional glimpse of sun and a slight breeze makes for a more lightened atmosphere with less humidity. We are out here today as Liz and Betty will be responsible for a *turtle-tour* for the first time*,* and Sarah is here to teach them how to do it. Sarah is one of two leaders in Saving Turtles; a non-profit, volunteer-driven environmental organisation that works to rescue and rehabilitate injured and sick sea turtles in the tropical waters surrounding Cairns, a city bordering on the Great Barrier Reef. Here, the organisation runs two home-made *turtle rehabilitation centres,* also called *turtle-hospitals.* These are improvised yet sturdy and well-functioning centres made for sea turtles where volunteers care for up to twenty-odd animals at a time.

This morning, we are present at one of these hospitals located out on Fitzroy Island, a popular tourist destination where people come to snorkel on the island's surrounding reef and stay at a luxury resort. Given the influx of tourist that come to this island, Sarah has recently started doing *turtle-tours*; informative talks conducted by volunteers about the work done to rehabilitate sick turtles where visitors are shown around the centre. Only the volunteers that Sarah see as qualified enough are allowed to conduct turtle-tours. With backgrounds in marine-biology, Liz and Betty have therefore been allowed to be in charge of the turtle-tours a couple of days each week. As we open the doors to the turtle-hospital, Sarah starts instructing them about the turtle-tour which is done around a "display tank" where two green turtles by the name of Bonny and Clyde sit still on the bottom. These turtles are in good condition, soon to be released and thus considered healthy enough to be displayed, which might cause a bit of stress to some animals as ten to fifteen tourists routinely flock around their tank to look at them. The display area is therefore separated from the rest of the hospital.

Sarah: "*...one was found up in Wongai, that's the one with the spear-wound, and the other up in Daintree...the one from Daintree is a suspected shark bite, it had markings underneath its belly and on its shell from a shark taking a bite out of it...*"

Liz:"*A spear-wound*?".

Sarah: *"Yeah right, but we don't say that. You can say it was found with a hole in it which was caused by an unknown sharp object...and when these were found they weren't in a starving*

condition, but just weak and with wounds that needed treating- so that has enabled us to quite quickly get them healthy again, you can say that".

It becomes clear that doing a turtle-tour is not just about providing people with any kind of knowledge about sea turtles, but about highlighting some topics while refraining from others. From other volunteers, I know that the so-called spear-wound on the turtle is suspected to have originated from aboriginal hunting, which is often done with harpoons from boats and something that has come to be a highly contentious issue in Queensland lately. While Sarah has confessed to me that she is adversed to turtle-hunting of any kind, she is careful not to have the volunteers talk about aboriginal hunting during turtle-tours, as she is afraid it might cause bad publicity or be consider disrespectful by some people.

While Sarah goes through the essentials in a turtle-tour with Liz and Betty, I have other tasks to take care of. As the others are busy preparing, I have been left with the ungrateful task of changing and washing the *filter-bags* in the hospital, as well as thawing and cutting up frozen squid to feed the turtles with. The filter-bags are bags of cloth that cover the pipe-openings running into the tanks where water is pumped in from the ocean. This is to ensure clean water for the turtles which is necessary to get them healthy. The bags are meant to provide a filter that is thin enough to make water run through it without overflowing, which could cause dirty water to flow into the tank, and thick enough to prevent algae and other unwanted organisms from filling up the tank. Every morning, a thick layer of dirt and algae covers the inside of the filter which has to be washed off to keep the bags filtering properly. This is done on a designated pole where the bags are turned inside out and washed thoroughly with a high-pressure hose. As the fabric of the filter-bags is thick, slippery and often dirty, turning them inside out is truly strenuous work.

While I busy myself with this task, I watch the turtle-tour from a distance. A group of 10 people arrive, mostly australians as well as a couple of germans. Liz introduces them to Bonny and Clyde and explains the ailments they are suffering from and their individual histories; where they were found and how they were transported to Saving Turtles. Moreover, the intricacies of caring for turtles in a rehabilitation centre is explained; the day to day routines like changing filter-bags or feeding the turtles with cut-up squid. When Bonny swims up next to one of the tourists, Andrea demonstrates how Bonny likes to be scratched on a particular spot on his belly. People laugh. Clyde however, seems less interested and stays near the bottom of the tank. "They have different personalities" says Liz. While Liz scratches Bonny, Betty starts talking about the biology of sea turtles, how old they get, how they reproduce, what they eat in the ocean as well as threats facing sea turtles today.

Betty: *"about one in a thousand hatchlings make it. It used to be one in a hundred hatchlings that made it, but because of human impact that number is down to one in a thousand...so humans are the biggest threat...beach development, pollution and boat strikes are affecting the survival rate of turtles".*

Liz shoots in: *"it is not only humans that are a threat but natural predators. One, however, is not natural and that is the feral pig. It does a lot of damage to turtle eggs and is not part of the indigenous environment...however, in some asians countries or in Africa, people even eat turtle still..."*

Making sense

This is taken from a normal day at one of Saving Turtles' rehabilitation centres. It provides a short glimpse of some of the many practices, sayings and doings a volunteer has to engage in on a daily basis. From engaging in the bodily and rather unreflective task of washing filter-bags and thawing squid at one point, to engaging with tourists from other countries in a turtle tour, these are just some of the practices that structure the day of a volunteer. Regarding the turtle tour, what immediately strikes me here are the shifts between widely different sea turtles. The emphasis on Bonny and Clyde with their individual specificities and attributes is followed by a jump in scale to an abstract biological turtle where universal, seemingly timeless attributes are emphasised, which is again followed by a narrative about human and "un-natural" threats that cause turtle populations to decline. And while all this is present, there is also the issue of aboriginal hunting looming in the background, not explicitly referenced to, but nevertheless informing how Liz and Betty do their turtle-talk. While some countries "eat turtle still" the fact that many aboriginal australians hunt and eat sea turtles is something Liz is undoubtedly aware of, and yet it is not mentioned.

How should I understand these strikingly different ways of talking about sea turtles that are present in a single turtle tour? Is this just talk? Or are there deeper differences at play here? And how am I to make sense of the different practices involved, where one might be busy washing filter-bags in one moment and then suddenly one tries not to talk about aboriginal hunting? And how does all this relate to conservation efforts directed at turtles in Queensland on a more general level?

This thesis tries to give a tentative answer to those questions by exploring some of the complexities that underpin the work done to heal sea turtles. The questions I ask throughout this paper have grown out of an ethnographic concern; to take account of how other-than-human agencies make a difference in this work. I have tried to analyse what goes on when sea

turtles and humans meet and touch, and make evident the way human volunteers shape sea turtles through their caring practices, while also take account of the way sea turtles, algae, systems of pipes, pumps and filters come to shape humans.

Theoretical positioning- unsettling boundaries

To really capture what goes on in Saving Turtles, to attend to the nexus of practices that shape humans and sea turtles in different ways, it becomes necessary to look at something more than symbols or language where I ask questions about *epistemology*, but to attend to the *ontological* aspects of this work. I here place myself roughly I line with what has been termed the "ontological turn" within anthropology(Henare et al. 2007).This represents a miscellaneous group of thinkers and writers who in different yet connected ways have turned towards exploring how things, materials, animals and other non-human critters are linked up in and even co-constitute human social worlds. Building on work from Bruno Latour with his Actor Network Theory, John Law with his material semiotics, as well as Donna Haraway with her focus on human-animal relations, this field productively opens up anthropology to include other non-human beings and things as important ethnographic concerns that must be accounted for when analysing human culture and sociality.

By shifting the ethnographic gaze towards *practices*, and by the use of a *performative* approach, these writers have opened up a field in social science for exploring nature, materiality, things, and non-human animals, as more than a firm and given basis for human symbolic representation, to be explored only as a *social construct*, to looking at how these come into being within assemblages of humans and non-humans(Law 2007). This builds on a particular understanding of ontology it is worth explaining briefly here. While ontology in more a more traditional philosophical sense connotes something transcendental and true, regardless of human experience, seen as a given *world*, or as the study of *existence* and *being* on a universally true level, as in the *being* of sea turtles and humans, ontology is here understood as inherently multiple(Paleček and Risjord 2013, Gad et al. 2013). Rather than seen as given and fixed, within the ontological turn, ontologies are taken as something that *emerges* in relations between humans and non-humans where it is understood as an effect of relations rather than something inert and unchangeable(Law 2007: 6). Taking this seriously calls for a fundamentally processual understanding of humans and sea turtles and even *reality,* where ontology here becomes *onto-genesis* through and through. Human volunteers, sea turtles and reality is never settled or finished, but always in a process of becoming through relations. This processual and emergent understanding of ontology means it cannot be taken for granted, but requires it to be analysed through specific timed and situated relational assemblages of humans and non-humans to be grasped.

To make evident the implications of taking these theoretical developments seriously, it is helpful to delineate clearly what I am writing against here. As Viveiros de Castro has argued, anthropology is in many ways a Kantian science, in the sense that it is grounded in certain philosophical assumptions about the world as something separated from human language and meaning-making(Gad et al. 2013: 82). Kant's famous distinction between "things in themselves" and "things for us" is mirrored by a default assumption inherent to much of anthropology that the physical, *natural* world is given and inert, while there are many cultural viewpoints through which this world can be interpreted. Building on this thinking then, the task of anthropology is to examine the multiple ways people create meaning out of a given natural world, while only touching on animals, materials or nature in the way they might feature in symbols or language. As Karen Barad has argued, this makes up the basic tenets of *representationalism*; a social constructivist perspective assumes a divide between human representations of the world and the material world itself(Barad 2003). Representationalism thus hinges on several interrelated divides between nature and culture, objects and subjects, things and words, materiality and meaning that are highly problematic in the way it ultimately renders the physical, natural world as uninteresting when analysis human culture.

My point of departure can be seen as an attempt to move beyond the analytical impasse created by these dualisms. I here take inspiration from writers within the ontological turn as well as from overlapping perspectives within what has called multi-species ethnography and post-humanism in the way they work to challenge deep-seated notions within the social sciences of what it means to be human. In "We have never been modern" Latour tells us that modernity involves making grand claims about what counts as nature and what counts as culture, but shows that in practice they are all mixed up into endless hybrid forms. Modernity, through people's practices, produces only *natureculture*s(Latour 1993). Taking the cue from Latour, Donna Haraway turns her gaze towards relations between humans and other species and claims that "we have never been human", in the way that we have always been more than *just* human (Haraway 2008). Rather she claims, we have always existed through our relations with other kinds of living beings. As argued by Tsing, human-nature has always been an *inter-species relationship* (Tsing 2012: 141). This effectively questions the category of the human as it is commonly understood through a humanist liberalist lens, which presupposes humans as bounded individuals. Whether it is bacteria in our digestive system vital for our survival, or playful dogs, by focusing the ethnographic gaze on the relation-forming practices humans inevitably engage in with these other critters, Haraway shows how we as individuals are always *becoming-with* these beings, rather than defined by any primordial essence. For Haraway, this provides an effective counter-measure to the idea of human exceptionalism; the hierarchical and teleologically informed narrative of humans as somehow above and

ontologically distinct from the rest of nature.

Politics

So the arguments laid out so far take as a grounding assumption that human culture and sociality is something "more-than-human-sociality"(Tsing 2013). As argued within Actor Network Theory, this means that non-human animals, as well as inanimate things and matter should be seen as having *agency* in the sense that they might make a difference in a pattern of action(Latour 2005). For Latour, non-human things should thus be considered as actors in their own right, where actor and agency are understood as disengaged from *intentionality*. This has important consequences for how politics should be understood. As Latour has argued in Politics of Nature(2004), this calls for a different understanding of politics that takes into account the effects these other beings and things have on humans. A difference can here be drawn in the way this insight as well as that of there being a multiplicity of ontologies, is put to use among different writers. Latour has here argued for developing a "parliament of things", involving a kind of ecologisation of politics that seeks to involve non-humans in a more encompassing political collective where the aim is to compose better *worlds* that take non-human agency seriously(Munk and Abrahamsson 2012).

Proposing a new and better way of practicing politics, resonates with how ontological difference has been taken up by writers within post-colonial theory. Seeking to render the belief in a single ontology less stable, writers here explore differences in cultural viewpoints as differences in ontology(see Helen Verran 2001, Arturo Escobar 2008, Mario Blaser 2013 and Marisol de la Cadena 2010). Mario Blaser has here developed the notion of Political Ontology to point out the colonising effects of what he calls a "modern ontology" that hinges on a divide between nature and culture and sustains itself by suppressing other ontologies that do not take this divide as foundational(Blaser 2013: 6). However, as noted by Kirsten Hastrup, focusing on ontological differences between different world-views can sometimes take on the unfortunate image of ontologies as neatly bounded wholes, mirroring older critique-worthy conceptualisations of culture(Gad et al. 2013: 83).

A slightly different way to move forwards on these insights can be seen in John Law and Annemarie Mol. Rather than decide on what is a *better* composition of humans and non-humans, or attending to Political Ontology in the meeting between radically distinct cultures, their project involves a more empirically grounded, down to earth *onto-political* interference(Munk and Abrahamsson 2012: 55). Less interested in developing political solutions, they interfere with the idea of reality as given and single by showing how even mundane everyday tasks inside a single culture can involve the enactment of multiple realities

and where the empirical descriptions themselves are understood as part and parcel of this multiplication.

While I take inspiration from all of these directions, I find Mol's and Law's explicit empirically grounded focus on practices useful when attending to sea turtle rehabilitation. I here make use of Mol's notion of *enactment*. Using what she calls a *praxiographic* approach to a disease like atherosclerosis, Mol develops the notion of *enactment* to point to how this disease is made to matter in different *events* that involve different relational assemblages of humans, technology and materials. Atherosclerosis is not a single and given fact, but a disease that is always *in action* by being enacted differently in various practices that take up in them humans and non-humans(Mol 2002: 32-33). Seeing different practices as something that *enacts* ontologies differently is somewhat different from how practice or *praxis* has been understood in more classic anthropology as something only humans engage in. Practice as *enactment* is something which takes up in it and shapes humans just as much as non-human things and beings thereby shifting the focus away from exclusively centring on humans to practices themselves.

Intervening and worlding

So, in line with Mol and Law, my focus in this thesis is on different practices in Saving Turtles and the ontologies that come out of them. This is productive for several reasons. Provided that ontological categories have to be enacted into being, to be made real through practice, this can be used to take seriously the forming of relations across what has been treated as stable and given boundaries like nature/culture or human/animal and explore these boundaries and identities as provisional, as something that emerges through specific practices where the methodological focus is on non-human actors as well as humans. In relation to Saving Turtles, this helps me try to abstain from taking boundaries between human volunteers and sea turtles for granted, and instead delve into to the practicalities of how these are enacted into being(Mol 2002: 32).

It is here important to note my own role in this endeavour. Throughout this thesis where I attend to enactments and ontological multiplicity, I draw together a variety of rather incongruous information. When I write about the movements of humans and sea turtles, images, texts and videos as well as broken excerpts of volunteer talk it is worth noting that this does not always stick together on its own. Although it sometimes presents itself as more or less coherent, it is important to note how it also comes together and is taken up in the research by a student such as myself. I am making these different claims, images, texts and the like, more concrete and tangible through writing about this.

What I am doing here can thus usefully be thought of as an *intervention* as suggested by Jespersen, Petersen, Ren and Sandberg(2012). They point to how cultural analysis should be seen as as an active form of intervening in a world where that intervention changes that world from within while also changing the analyst in the process(Jespersen et al. 2012: 7). In the field that I write about, I intervene on many levels; through involving myself in an organisation aiming to rehabilitate injured sea turtles and through drawing together pieces of information, a truly heterogenous body of knowledge, things, sayings, doings, objects, subjects, humans and animals, to produce a narrative that is somewhat coherent.

This means that when writing about different enactments of sea turtles, I am strengthening the *realness* of these enactments. I am contributing to enacting them into being, through doing practices that my informants do, on site in the turtle hospital, but also through the practice of writing and through my methodological focus where I specifically attend to practices(Latour 2005: 122, Law and Urry 2004). Without doubt, this has consequences for what kind of data I produce and how these are presented in this paper. This implies that when doing research, I am not merely uncovering an empirical field, a social reality which my words reflect more or less accurately. Reflection suggests that I *mirror* what I am writing about and is thus firmly placed within the confines of representationalism, where questions of whether my words represent *reality* correctly are always lurking close to the surface. Rather, I am contributing to *enacting* a certain reality into being, where the knowledge that comes out of this is a form of situated knowledge all the way down(Haraway 1988).

I here position myself somewhat at odds with the classic anthropological creed of contextualisation, of placing social phenomena within larger social wholes as though these exist ready made to shed light on the phenomena in question. As Bubandt and Otto discuss, what is entailed in the concepts of context or holism is never given, and they are both highly ambiguous concepts that have been critiqued both for their conceptualisation of reified stable social wholes as well as their vagueness(Bubandt and Otto 2010: 2). As Latour has argued, contextualising has in many ways gone awry in the social sciences, in the way it makes us tautologically decide in advance what kind of actors are seen as relevant, what frames of reference we are to understand our actors through and indeed what counts as an actor itself. By attending to context, social scientists have purportedly confused the explanation with what needs to be explained(Latour 2005: 8). For Latour, the only way out of this impasse is to "keep the social flat", to persistently attend to how associations between both human and non-human actors are made in practice and consequently to keep our gaze firmly fixed on the actors in front of us, almost myopically, where the contexts we attend to are only the ones made relevant by the actors themselves.

However, as Tsing argues(2010), this might overlook how we ourselves are inevitably engaged in a form of *worlding* when we try to understand and trace the connective ties that are being built between humans and non-humans in a network. We inevitably turn to explanations and interpretations that lie beyond what is closest to us in order to understand it. Tsing thus asks about those worlds that might be downplayed when we only attend to the making of networks right in front of us, worlds that come before and make things happen in the presence and how social researchers themselves are involved in effacing or strengthening different worlds. Inevitably, the social researcher is involved in cutting the network at some point and thus also contributing to the enactment of a world while perhaps excluding other possible *worldings*(Strathern 1996). Understanding analysis and ethnographic writing as a form of *worlding*, indicates that when taking part in practices in Saving Turtles and through writing about it, I am involved in a form of intervention of a world-making kind that cannot be seen as separate from these practices.

Consequently, it makes little sense to separate between reality, out there, and the practice of writing about that reality. Again, this follows the divides inherent to representationalism; where a world is assumed outside of those world-making tools we use to understand it. Rather, my ethnographic fieldwork and analysis should be understood as contributing to enactments through its methods for producing knowledge(Law and Urry 2005). This amounts to seeing knowledge as performative. It not only describes, but enacts. A distinction between the purely descriptive and the normative then no longer holds. If I am taking part in world-making through my methods for knowing and writing, then knowledge production is a *political* undertaking and something which requires ethical consideration(Barad 2011). Important questions then becomes; what kind of worlds do I want to engage with and make visible? And what kind of politics do I want to practice while doing so? My project can here be seen as a humble attempt to make evident the multiplicity of realities that go into healing sea turtles that will hopefully contribute to render the idea of the natural world as one, and ontologies as given less stable.

Questions

So, by placing myself squarely within these discussions my aim is this; to use the theories and methods associated with these thinkers as world-making tools that will help me tell an empirical story about turtles and people. My focus is thus first and foremost empirical and centres primarily on Saving Turtles, an environmental organisation in Cairns, Far Northern Queensland Australia and the efforts to heal and rehabilitate injured and sick sea turtles within this organisation. Here, people and sea turtles of varying species and kinds meet and interact on a daily basis. However, more than just interacting, humans and turtles here come to shape

each other on a deeper more fundamental level, in specific relational patterns that come into being through certain practices. It is these relation-forming practices that will be the focus in this thesis. By singling out moments where different practices present themselves, I attempt to show do they take up in them humans, animals, things, machinery and technology in ways that effect both human and sea turtle ontologies. However, as a form of worlding, I also touch on discussions and political decision-making that goes on outside of Saving Turtles, but which nevertheless connects to the practices within its hospital walls, if only partially.

My project can here be compared to a somewhat different strand of literature on nature within the social science literature. William Cronon(1996) traces the historical roots of nature-conservation back to an idea of wilderness, which he argues is inherently fraught with inconsistencies and contradiction. In an Australian setting, a focus on nature has to a large degree revolved around issues of native and invasive species where this has been scrutinised as expressions of identity and belonging (Trigger 2008) as totemic symbols(Franklin 2006a) or even nationalism (Franklin 2002: 120) and xenophobia(Warren 2007). While these more semiotic approaches undoubtedly raise interesting questions in relation to nature-conservation, it can be argued that it tends to overlook specific grounded practices and ultimately renders nature-conservation as expressions of something else, something lying elsewhere than what goes on in the immediate encounters between humans and other non-humans. Likewise, by dismissing concepts such as wilderness or nature/culture dualisms as inconsistent or even *false*, this can fail to take seriously how these symbols and imaginaries might really mean something to people, despite their non-coherent character and how they even come to produce realities in themselves. While not dismissing this literature, my project is rather to look at specific practices where humans and animals in Saving Turtles meet. Rather than see the inconsistencies that present themselves in nature conceptualisations as flawed, when read through the heuristic of enactment, I take these to be productive points of entry into exploring the messy reality of turtle rehabilitation.

In accordance with a specific focus on practices, I therefore ask; what makes it possible to rehabilitate turtles and how does it relate to aboriginal sea turtle hunting? how do practices in Saving Turtles come to shape humans and sea turtles on an ontological level? how does this involve uncertainty, non-coherence and power-exertion? And, how does the work of rehabilitating sea turtles enact wilderness as a particular form of nature?

Thesis outline

My thesis is divided into chapters that more or less follow the course of a turtle that goes through rehabilitation. From swimming in the ocean sick or injured, or washed up on a beach

entangled in fishing-line, it gets picked up by lay-people or national park rangers and transported to Saving Turtle's rehab centres. Here, it is treated and cared for by volunteers. When the turtle has been successfully *rehabilitated*, it is released back into the sea, the ultimate goal of treating turtles. It is now able to survive on its own, in the wild. This is how a successful rehabilitation process is imagined by volunteers in Saving Turtles. It represents a series of stages in a trajectory from sick to healthy, a teleology though which the people in Saving Turtles narrate and understand the work they do. I have structured my chapters in accordance with this temporal and spatial trajectory, from sea to rehab-centre and back again.

However, while taking these stages as their starting point, the discussions in this thesis revolve around those moments when this trajectory is altered or disrupted. As it turns out, few things are smooth in turtle rehabilitation. It involves power-exertion, resistance as well as productive and destructive friction on multiple levels. My discussion thus move through moments of non-coherence and tension, it stays with conundrums, uncertainties and forks in the road, where the path you choose forward has worldly ontological consequences. So while following the different stages in a successful turtle rehabilitation process, my intention is to stay in each place and untangle some of the complexities underlying each of these moments. In this way, this paper makes a double move by following my informants own abstraction of a turtle rehabilitation process as well as providing situated accounts and stories that break with this generalisation. However, while inherently produced out of my own situated presence in the field, it is my hope that these stories can again be used as robust and flexible generalisations about similar situations where human-animal relations are being formed.

In chapter two I focus on a controversy surrounding turtle hunting and show how sea turtles are enacted as threatened. I argue that a particular ontology that hinges on a nature/culture divide works to make aboriginal hunting illegitimate and establishes conditions which allow for turtles to be treated by Saving Turtles. In chapter three I discuss how sea turtles and humans interact in a turtle washing session and argue that they both humans and sea-turtle ontologies are being shaped through their relations and the practice in which they take part. In chapter four I explore the uncertainties and non-coherences that arise out of the work to treat a turtle with floaters disease and argue that different ontologies emerge simultaneously. In chapter five my discussions revolve around aspects of power exertion and death which I argue is embedded in care and love. Chapter six concentrates on the moment when turtles are released into the ocean where I argue that wilderness-nature is enacted. Lastly, in my conclusion I reiterate some of my main arguments and end with an empirical note on aboriginal hunting.

Chapter 2: Turtle controversy

While most of my fieldwork was conducted within a single organisation; Saving Turtles, in this chapter I start off outside the confines of this organisation and focus on some of the political discussions and contentions that surround the efforts to save and rehabilitate sea turtles in the state of Queensland, Australia. While these might not be immediately visible in the practices undertaken by Saving Turtles, they nevertheless connect to the more mundane work in their turtle rehab-centres by creating conditions which allow for sea turtles to be taken from the sea and into the tanks and tubs in these centres. I here focus on a controversy involving aboriginal sea turtle hunting to show how sea turtles come to influence policy making on a state level. I here ask; why is the aboriginal hunting of sea turtles seen as so controversial? And what goes on in the meetings of different ways of relating to sea turtles, as hunters on one hand and conservationists on the other? By answering these questions I attempt to untangle some of the ontological boundary-making integral to much of the environmental movement in Australia that concerns itself with sea turtle conservation. I argue that the use of a visual and textual rhetoric enacts sea turtles as a unified and threatened group of animals and nature as a place separate from a human cultural sphere. As an ontology that comes with imbedded normativities, this has the consequence of rendering the aboriginal hunting of sea turtles illegitimate.

Hunting turtles

About a year before my fieldwork started in January 2013 a news story concerning the hunting of sea turtles made headlines in Queensland and throughout much of Australia. The story told of a young man referred to as a "business-guy-turned-animal-rights-activist", who had accompanied a group of indigenous hunters in the Torres Strait, a group of Australian islands north of Queensland, and without their knowledge filmed them with a hidden camera as they caught and slaughtered turtles and dugongs. Striking footage of a large adult turtle being slaughtered and cut up alive on a beach, blood pouring out on the sand and in the water, reverberated through different news channels in the ensuing months. The incident sparked debate concerning indigenous hunting rights and animal welfare in Queensland. The question posed in many of these stories was whether indigenous hunting rights should be allowed to trump the welfare of animals, implicitly stating that the killing of turtles was conducted with callous and brutal methods. Likewise, the contention put forth by numerous animal rights activists, was that turtles and dugongs were subjected to unnecessary suffering through aboriginal hunting, often referred to as "native title hunting", and that the legal framework that allowed for this hunting to go on should be changed.

In Australia, what is referred to as "native title hunting" or "traditional hunting" generally means hunting conducted by Aboriginal or Torres Strait Islander people under the auspices of the *Native Title Act 1993.* At the time of its enactment, this was a law that sought to address the historical and ongoing dispossession of land from indigenous people in Australia and is often said to have upended the *terra nullius* doctrine, the taken for granted ideology that had existed since early british settlement which claimed Australia was a no-mans land upon its colonisation. The law asserts the rights of Aboriginal and Torres Strait Islanders people to use land and waters in cases where there is a "*...connection with the land or waters...*" and where "*...the rights and interests are possessed under the traditional laws acknowledged...*"[2].

However, in Queensland this law was exempt from animal welfare provisions, meaning aboriginal people could hunt without having to consider the pain inflicted on the animals in question. While many environmental organisations had long argued for making Native Title hunting covered by animal welfare laws, in the wake of the news story about dugong and turtle hunting these arguments were given renewed momentum. Provided with spectacular pictures of a big sea turtle bleeding to death on national televisions, campaigners against sea turtle and dugong hunting were able to bring what they say as the loophole in animal welfare laws to the attention of a broader audience.

The controversy soon caught the attention of politicians on a national level where the oppositional Liberal Party used the case to focus on what they claimed were the inadequacies of the ruling Labour Party's enforcement of animal welfare laws. Coinciding with the run up to the election in October 2013, the then ruling Labour Party and the oppositional Liberal Party seemed to try to outdo each other in making promises to alter the hunting practices of aboriginal people. The case eventually had the effect of changing the Queensland Animal Care and Protection Act of 2001 in September 2013, when special amendments where added specifically to make aboriginal, native title hunting of sea turtles and dugongs accountable to animal welfare laws. The new law states that traditional hunting should cause as little pain "as is reasonable", and outlines changes intended to protect turtles and dugongs from "unreasonable pain"[3].

After many years of not having to take into account any animal welfare laws, aboriginal hunters in Queensland and the Torres Strait now have to prevent "unreasonable pain" when hunting, but only when hunting sea turtles and dugongs. What is about the hunting of these

2Native Title Act 1993: section 223, accessed on http://www.nntt.gov.au/Information-about-native-title/Pages/Nativetitlerightsandinterests.aspx 16.05.2014

3 Accessed on http://www.daff.qld.gov.au/animal-industries/welfare-and-ethics/animal-welfare 16.05.2014

two animals in particular that causes so much controversy and which enables special amendments to be added to the animal welfare laws? And why are new amendments to the Native Title act added at this particular moment in time, after many years of being exempt from animal welfare provisions?

Texts and pictures

To answer these questions, it is necessary to first delineate some of the textual and visual rhetoric deployed in various environmental organisations and explore how they create realities in which sea turtles feature. My aim is here to look at what texts and pictures do, meaning I attend to their performative material effects. More than just eliciting underlying meanings and metaphors in line what is often called *discourse analysis* or *deconstruction*, this involves treating text and visual representations as more than mere portrayals of reality, but as part and parcel of reality and as material actors that have real ontological consequences in the world.

This performative materialist understanding of language and text is often traced back to J.L Austin(1962) with his focus on *speech acts* where he argued for seeing words and statements not simply as descriptive, but as something with performative effects in reality. Austin thus represent an early opening towards seeing how human language, in the form of speech, is fundamentally part of the physical reality and even comes to bring realities into being. Similar arguments reverberate within post-structural theory in relation to text. In The Order of Things, Foucault argues that systems of knowledge do not only represent the world, but come to constitute their objects of knowledge (Foucault 2006: 13). Within STS, Kristin Asdal argues that nature is enacted into a governable and accountable entity through the use of statistics(Asdal 2008).

In line with this understanding of text, numbers and language, I look to the performative effects of the videos, pictures and texts used within the environmental movement and argue that central to the change of the animal welfare laws in Queensland is the use of a powerful textual and visual rhetoric which enacts sea turtles a threatened group of animals and as a "pin-up" species for larger environmental issues. Here, the six different species of sea turtles in Australian waters are being conjoined under the category of a generalised *Sea-Turtle.* This enactment has the consequence of making an otherwise illegible group of animals with divergent physique and behaviour into more concrete object that allows for political action and the forming of new policies. I here show this unified Sea turtle comes with specific in-built *normativities* concerning time and space which renders aboriginal "traditional" hunting illegitimate. Sea turtles are here enacted as a timeless animal which is now seen to be under threat du to human induced changes to the environment.

A charismatic ocean critter

Sea turtles are charismatic animals. Although I worked alongside people who were more than averagely interested them, many other people I got to know outside of Saving Turtles would go on to tell me affectionate stories of having encountered them in nature when snorkelling or diving. Frequent words used to describe turtles were *cute* or *friendly*, but among people in Saving Turtles they were also described more vividly as "ancient legends", or even "warriors of the sea". Sea turtles seem to be thought of as a group of animals that deserve protection by virtue of somehow being more special and unique than other more mundane critters of the ocean and appear to function as a *pin-up* species for many environmental organisations. While interviewing a "species coordinator" for WWF Australia, I was told that WWF has campaigns directed specifically at sea turtles to evoke attention. Focusing on sea turtles works, I was told. As an animal that most people know of and have a positive relation to, they can be used to bring attention to larger more abstract environmental issues like reef destruction and rising sea temperatures which effect sea turtle populations. The rationale behind this I was told, is to appeal to people's empathic sense by showing them an animal with a clear recognisable face, and as a group of animals present in tropical and temperate oceans around the world, it is seen as fitting for a self-consciously global organisation like WWF. On their webpage, WWF lists sea turtles as one of their few "priority species". Under the rubric of "marine turtles" a picture of a large adult green turtle floating above a coral reef is coupled with a short text that captures much of the underlying imagery and attitudes in conservation efforts directed at sea turtles in Australia.

"For more than 100 million years, marine turtles have covered vast distances across the world's oceans, and have been an integral part of tropical coastal ecosystems. Over the past 200 years, human activities have tipped the scales against the survival of these ancient mariners."[4]

What kind of nature and what kind of sea turtle is being done through this text and image? In referring to sea turtles as "ancient mariners" there lurks a culturally informed image of a certain kind of nature nested in a strong nature/culture binary. Through this text "marine turtles" come to stand as a representation of nature itself. This is in line with what Helen Verran and Britt Ross Whintereik calls a *one-many* generalisation(Whintereik and Verran 2012).The individual turtle on the picture is not relevant, it is instead made into an abstract representative for all sea turtles in the world, even all sea turtles throughout evolutionary

4 Downloaded at: http://www.wwf.org.au/our_work/saving_the_natural_world/wildlife_and_habitats/australian_priority_species/marine_turtles/ 12.05.2014

history. While biologically, the turtle on the picture would be classified as a *chelonia mydas*, commonly known as a green sea turtle, through the combination of text and picture, the animal comes to represent all species of sea turtle joined together. The individual animal on the picture is made to stand for something in general, something which relates to all sea turtles and thus couples different species together as a coherent unified group of animals, while species specific biology or individual traits that distinguish animals from each other are effaced.

In many ways, this resembles what has been described in relation to people's attitudes towards whales by Arne Kalland. In "Unveiling the Whale: Discourses on Whales and Whaling", he argues that the anti-whaling movement creates an image of a "superwhale" where perceived positive traits drawn from many different whale species, like high human-like intelligence, friendliness and uniqueness, are put together in a powerful and alluring symbol of a single whale(Kalland 2009:43). While indications of a "super-turtle" can be seen in the way different turtle species are conjoined under a single category, I am somewhat hesitant in applying the term in this instance as for Kalland, the superwhale seems to be thought of as something akin to a false symbol, a product of mythic creation that he argues has little basis in a material reality and thus something that only exists in human minds(Kalland 2009: 36). While Kalland does not deny that this symbolic super-whale has real political consequences, after all it sways political decision-making, through his social constructivist stance, it is nevertheless treated as symbolic meaning-making out of touch with the *real* world.

A vital difference can here be drawn between Kalland's social constructivist approach to the super-whale and my own performative approach to pictures and texts about sea turtles. Instead of dismissing the conflation of different turtle species into a single turtle as a symbolic representation out of touch with physical reality, or science, this way of conjoining different turtles under the single category of *marine turtles* should rather be seen as having real performative effects. It enacts a particular turtle and nature ontology into being.

Temporality

In this enactment, there seems to be a peculiar sense of temporality that is being done alongside this turtle. The generalised turtle that emerges through the text and picture seems to exists irrespective of time and history, or rather the implicit message seems to be that this is how it is supposed to be. We are told that a similar turtle existed a 100 million years ago, but that in the wake of human induced changes to the environment a fragile balance has been tipped. So while sea turtles used to traverse the ocean more or less unimpeded by human activities, they are now faring progressively worse as result of changes brought about in the

last 200 years, in the time of human industrial activity. Moreover, the sea turtle here works as an example of a larger nature that is in danger as a result of human activities. It becomes an example of nature with a capital N. Nature is here likewise seen to embody a sense of time where changes belong to the past, to evolution stretching over millennia or to big geological events like the forming of continents. This perceived state of near timelessness is what separates it from culture and modern *society*, a space made up of humans. An excerpt from Saving Turtle's web-page exemplifies this rationale:

"As morning dawns across Far North Queensland, it is amazing to think that turtle tracks left on the beach by last night's visitors could have been found on similar shorelines 150 Million years ago. Far North Queensland is a magical place. Still protected by its remoteness it exhibits many of nature's wonders and remains largely untouched by the expansion of civilisation and our insatiable demand for more of everything."[5]

The imagery used here is distinctively romantic. It paints a picture of Far Northern Queensland as a place with untouched sublime nature, where sea turtles are right at home, and where this can remain so, should it only be left untouched by human industrial activity. So there is a clear logic in play here where nature and culture are divided up into different conceptual categories as well as to different spatial zones, different spheres. Furthermore, this imagery hinges on the idea of a state of balance that needs to be in place between these two spheres for sea turtles and the remote, sublime Nature to retain its magical qualities, where the encroachment of one sphere on the other, that of the human industrial-cultural sphere onto nature, disrupts this balance and corrupts nature.

By drawing on the image of a frail balance that needs to be carefully maintained and by presenting sea turtles as a threatened group of animals, we are encouraged to act in a specific way. While not explicitly stating how sea turtles are to be treated, one is left with the message that activities or practices which have a negative impact on turtle numbers, or actions that impede on the frail remoteness of Nature, the place where these animals live, are morally bad. Thus, the combination of texts and images we are presented with, do not only portray a certain reality, but enacts a boundary between nature and culture where certain normative ideas concerning how we are to act towards sea turtles are established. Another text and image taken from WWF's web-page amplifies this notion. Next to a picture of a dead leatherback turtle entangled in a fishing net a text tells us that:

"Marine turtles face a wide range of potentially devastating threats in the tropical waters of Australia. These include incidental capture in fishing gear, boat strike, ingestion of, and

5 I refrain from referencing this text to ensure the anonymity of my informants.

entanglement in, marine debris, feral predation, illegal hunting, unsustainable traditional hunting, and coastal development that impacts on nesting beaches and hatching success.

These threats directly reduce the ability of turtle populations to adapt to and recover from the impacts of climate change."[6]

Again, the image of a balance is evoked with a one-many generalisation being done alongside it. Indicating from the prevalence of these ways of talking and writing about, as well as visually portraying sea turtles, I would argue that this is a dominant and very powerful way of *doing* a certain kind of nature and sea turtles that has effects. This doing is not politically neutral, but establishes an ontology with in-built normativities concerning how humans are to engage with sea turtles(Moser 2008: 99). As mentioned above, in this ontology turtles and nature are being done as timeless and as something that ought to remain, or should be made to be, separate from human industrial influence.

Making hunting controversial

It is in the combination of this ontology and the way sea turtles are used as a charismatic pin-up species for the much of the environmental movement with excessive use of spectacular pictures and video, that the aboriginal hunting of sea turtles comes to be seen as highly problematic for many people. The textual excerpt above mentions illegal and unsustainable traditional hunting as some of threats faced by sea turtles in Australian waters. Other organisations with a more explicit focus on the aboriginal hunting of sea turtles, exacerbate the perception that this is a major threat faced by these animals. Taking a stance against native title hunting of sea-turtles in Australia, the Australian Wildlife Society states on its web-page:

"This is not a conflict between indigenous rights and animal rights activists; it is a conflict between so called 'indigenous rights' and all right-thinking Australians. Archaic practices such as the inhumane stone-age killing of animals with a concrete block have no place in modern Australia. One can hardly call 'traditional hunting' reasonable when high-powered rifles and modern, fast motor boats are used to hunt our protected marine wildlife. Clearly the laws of Australia must apply to all Australians equally – with no exemptions to anyone"[7].

By enacting an ontology through texts and images where nature and sea turtles become timeless, for the Australian Wildlife Society, the logical consequence of this seems to be that killing of sea turtles can only be done through perceived timeless practices. Arguments of this

6 Downloaded at http://www.wwf.org.au/our_work/saving_the_natural_world/wildlife_and_habitats/australian_priority_species/marine_turtles/marine_turtles_and_threats_they_face/ on 12.05.2014

7 Downloaded at http://www.australianwildlife.net.au/project_turtle.html on 12.04.2014

type resonated with many of my informants within Saving Turtles. Alice, a student in her early twenties, argued that traditional hunting was not in itself bad, but that it was being done under false pretences as modern harpoons and guns were being used. For others, like the leader of the organisation Sarah, all hunting of sea turtles was considered morally repugnant. A place named Turtle Cove near Fitzroy Island were Saving Turtles ran on of their rehab-centres, was repeatedly referred to as slaughter cove, from the aboriginal hunting of sea turtles that went on that area from time to time.

The moral indignation spurred by the aboriginal hunting of sea turtles, seems to be grounded in an imaginary based on a metonymic pairing of *native* and *nature,* as well as that of seeing aboriginal *tradition* as involving static unchanged practices. These categories are again mirrored by their dichotic opposites, that of modern australian society where practices are seen as evolving and changing. When hunting is conducted with equipment perceived as modern, a whole web of interrelated dichotomies and metonymic associations is thrown into disarray. For much of the environmental movement, these perceived and felt disruptions fuel the argument that hunting in this manner is traditional in name only, and thus illegitimate and should be stopped. According to this rationale then, native title hunting seems to be okay as long as it done in accordance with a timeless natural temporal space where hunters simply become part of the landscape, part of nature. By framing the issue of aboriginal hunting as traditional hunting with modern means, it becomes a target of critique as it is seen to belong to a different temporal logic than that given in the rationale that sees nature as timeless, where one only engages in timeless practices.

However, while the conclusion could be made that hunting done with perceived traditional equipment is thus rendered legitimate, the killing of turtles without such modern weapons is paradoxically referred to as “stone-age killing of animals with only a concrete block” and labelled “archaic” and not up to the standards of “modern Australia” by the Australian Wildlife Society. Given the different arguments that are at play here, aboriginal hunting seems to be simultaneously considered too modern to be legitimately called traditional, on the basis that motorboats and rifles are being used, but also too traditional, in the sense that this implies brutal hunting methods out of touch with a modern nation. What is that enables this, on the face of it, paradoxical labelling where some practices are both too traditional and too modern?

The statement speaks of much of the ambiguity underlying aboriginal native title in Australia in general. As Elizabeth Povinelli notes in relation to how indigenous rights are played out in practice, these kind of paradoxes go to the heart of how the self-consciously liberal multi-cultural australian state tries to respect and incorporate cultural alterity into its legal

framework(Povinelli 2002). When the state works to consider aboriginal beliefs on their own terms so to speak, the effect Povinelli claims, is a Batesian double bind; a simultaneous inclusion and exclusion of aboriginal "tradition", where tradition is reified to include only certain cultural traits that are seen as traditional enough. While seemingly altering itself to include beliefs and practices that are culturally different, the state still retains the right to decide what kind of practices or beliefs that can legitimately function as vehicles for expressing cultural difference. Moreover, the state's evaluative apparatus that works to incorporate aboriginal tradition is grounded in a dichotomy of nature as opposed to humanity, in contrast to aboriginal belief systems where human actions are central for the well being and functioning of the land(Povinelli 1995: 516)

So when special amendments are added specifically to include the aboriginal hunting of turtles and dugongs under animal welfare laws, this is indicative of the highly ambiguous ways the state deals with issues concerning native title. However, to reiterate the question asked above, why are these amendments added at this particular moment in time and how should we understand this change? While the textual and visual rhetoric deployed by WWF and the Australian Wildlife Society problematises the legitimacy of hunting sea turtles, this does not in itself lead to this policy change. Animal welfare laws and aboriginal sea turtle hunting has existed alongside each other for some time without one impeding on the other, so what is that ultimately leads the native title act to be covered by animal welfare laws?

Ontological differences

At this point it is important to stress how the controversy surrounding turtle hunting, where you have hunters who see turtles as prey, and campaigners against turtle hunting who see turtles as a threatened group of animals to be protected, should not simply be framed as a disjuncture between different ways of *seeing* an animal. It can be argued that this is how environmental organisations like the Australian Wildlife Society frames this issue, where the aboriginal practice of hunting sea turtles is ultimately thought of as a practice involving a given natural object. Likewise, when the state decides to add amendments to the Native Title Act, this seems to be done on the basis of understanding the natural world as given where the disagreement between hunters and those opposed to hunting is seen to stem from a cultural difference.

However, as should be clear from the empirical discussions above, there are important ontological aspects of how these two different perspectives on sea turtles are also ways of relating to turtles and of enacting different turtles altogether. So instead of reducing the different beliefs and ways of perceiving sea turtles as different cultural perspectives on a

seemingly objective, given animal, entailing that my analyse moves on an epistemological level, what is being done here is more fundamentally a difference in ontology(Strathern 2011). To fully unravel how this political change comes about, this controversy should be understood as a meeting of two enactments where ontologically distinct sea turtles emerge.

As the controversy, after months of debate, led to a policy-change where animal welfare laws now cover Native Title hunting, the ontology that enacts nature as opposed to culture can be understood as effectively undermining aboriginal ways of enacting nature and sea turtles rendering it illegitimate. The dominant ontology we are faced with here is premised on the idea of what John Law calls a one-world-world, where the world is seen as essentially whole and coherent, and where objects of nature like sea turtles and dugongs are understood as being materially given. This rests on the assumption that we live in one given world, one ontology, yet where there are many world views, many cultures through which these natural objects are interpreted(Law 2011). In many ways, this resonates with Blaser's argument in the previous chapter, in which a modern ontology sustains itself by suppressing other less dominant ontologies(Blaser 2009:16).

While aspects of power and domination are obviously part of this controversy, in this case it should be noted that the different sea turtle enactments and their incompatibilities does not lead one ontology to suppress another by necessity, but becomes a source of contention when they are brought together and mediated in a specific way; through a video of a bleeding turtle slaughtered on a beach shown on national television. Again, as was argued above in relation to the performativity of text, the material performance of the video and the narrative style of the news-story is vital in this respect. It *does* something. It brings together two very distinct ways of enacting sea turtles and effectively undermines aboriginal hunting of these animals by presenting it as a morally corrupt practice conducted under false pretences.

What we are presented with here is a novel assemblage of humans and non-humans; of sea turtles, aboriginal hunters, politicians, animal rights activists, conservationists, a video filmed with a hidden camera and a news-story narrated in a certain way. Through this assemblage, animal welfare laws are materialised as inadequate and incompatible with Native Title hunting in its current form in a way that leads to political change. It is first through this novel assemblage that special amendments concerning the hunting of sea turtles and dugongs are added to the Native Title Act.

Political critters

What is interesting in this respect, is that while the animal welfare laws of Queensland now

cover all hunting done in accordance with Native Title laws, these amendments are targeted specifically at sea turtles and dugongs. They outline detailed descriptions and drawings on how to kill sea turtles and dugongs to cause as little pain as possible. The law's repeated emphasis on “reasonable pain”, resonates with a liberal logic intent on extending human rights to non-human animals. The famous question originally asked by Jeremy Bentham of “can it suffer”, seems to be above all doubt in this debate. Sea turtles and dugongs seem to be animals that law makers and lay people have no trouble considering as sentient beings worthy of ethical consideration.

By now it should be apparent that sea turtles are politically potent critters. The way sea turtles are enacted through text and image is not neutral, but emerge with imbedded normativites. Given they are enacted in a specific way, turtles have the agency to provoke political change. Sea turtles can here be thought of as *actors-enacted*(Law and Mol 2008). While the texts and images used by the environmental movement, and the video and news-story concerning turtle hunting enacts sea turtles in a specific way, where their agency is mediated through a whole network of humans and non-humans, I must also take into account the material specificities of sea turtles themselves as vital to bringing about political change. While turtles are enacted, they also act back. The looks and behaviour of sea turtles, the way a turtle bleeds to death on a beach while having its flippers cut off, are not only given meaning in the way it is being done, through an enactment, but sea turtles are also doing themselves and thus contributing to bringing about a policy change.

Concluding remarks

I have now outlined some of the political controversy and ontological boundary-making carried out by environmental organisations with an explicit focus on sea turtles. This informs and create conditions for the work done by Saving Turtles to heal sea turtles in their rehabilitation centres. By enacting sea turtles as a unified threatened, “pin-up” species, and by evoking an image of a disrupted balance between nature and culture, conditions are in place for an organisation like Saving Turtles to try to counter this process by *saving* and rehabilitating these animals. A dominant ontology with a clear nature/culture divide thus asserts itself at the cost of a less dominant one, that of aboriginal hunters.

So this chapter has largely moved within a field one might call political in a common sense understanding of the term, where I have explored some of the ontological aspects of environmental politics and a controversy surrounding sea turtle hunting. This has been done through an intervention where I have brought together different groups of people, animals, pictures and texts from widely different places; politicians in Canberra, hunters and sea turtles

in the Torres Strait Islands, as well as texts and pictures from the internet. By actively bringing these together, this has enabled me to tell a story about *onto-politics* in the environmental movement which Saving Turtles forms a part. However, as will be clear from the empirical discussions in the ensuing chapters, it should be noted that this field is not necessarily larger in the form of being more *complex* than what goes on within the confines of Saving Turtle's rehab-centres.

Before I delve into the corporeal meetings between humans and sea turtles in chapter three, it should be noted that moving from a political field to more grounded practices should be not be taken as a move between two different levels, where the political discussion I have made evident here are seen to be higher and encompass what goes on in a turtle hospital. While one could say that I am here telling a story about sea turtles by starting out *big,* and now turning to seemingly smaller matters that the political decision-making necessarily encircles, this imposes a too ordered and linear understanding of reality than what I want to invoke here. This move, from a political controversy to a more limited focus on Saving Turtles, is better understood through Marylin Strathern's notion of a fractal; a pattern that repeats itself at different levels with the same set of relations at every level. As Strathern notes, shifting perspectives outwards and inwards resembles a fractal pattern in that it permits the researcher to see complexity at one level, while loosing the fine details of another(2004: xv). When I now focus on a more limited space, the level of complexity indicated from what I have written about the environmental movement on a more abstract level, should not necessarily be understood as higher compared to the close encounters between humans and sea turtles in the rehab centre. And, although connected to the practices in the turtle hospital, it does not *encompass* what goes on there in a straight forward manner. As I will make clear in the next chapter, through the practice of washing turtles, a very different sea turtle emerges from the one I have described in this chapter. While the unified, threatened turtle is certainly connected to this one, as it allows for people to legitimately transport turtles from the sea by people and into a rehab centre, in line with a fractal pattern, they should nevertheless be taken as two turtles that might only connect partially, and in unexpected ways(Strathern 2004).

Chapter 3: Turtling; washing dirty turtles

In the next three chapters, I make an intervention of a different kind where I stay more in one place. I turn from the hyperbole and visual spectacle involved in the political discussions surrounding sea turtle hunting, to the more mundane and corporeal work of healing sea turtles in the two rehab centres run by Saving Turtles. I here look to a fundamentally different sea turtle suspended in the bundle of practices that some of the volunteers in Saving Turtles call *turtling*; a term used short hand to refer to the daily tasks and routines a volunteer has to carry out in the rehab-centre. As a verb that refers to a set of repeated practices, *turtling* is a good way to underline how volunteers and sea turtles are always being shaped through the practices in which they take part. In the rehab-centre, turtles are more verb-like than noun-like, the are always being *done* through turtling practices where an array of different things used in the rehab centre, like pipes, pumps, and filter-bags, as well as people and even algae shape them on an ontological level. Turtling can thus be seen as a set of different practices where turtles and human volunteers are enacted in different, yet entangled ways. The empirical stories in the ensuing chapters are thus placed within a social field shared among beings and things as as a form of "more-than-human-sociality"(Tsing 2013).

In this chapter, I want to to explore some of the aspects of this shared sociality inherent to turtling, by focusing on the practice of washing dirty turtles. As an instance of a grounded corporeal practice, this provides a good point of entry to show empirically how both humans and sea turtles are effected by this work. Through the encounters between human hands, turtle shells, algae, but also other inanimate things like towels, scrubbers, water and mud, the practice of turtle washing takes up in it humans and non-humans of various kinds that must be accounted for when ethnographically delving into the sociality that comes out of this work. Washing turtles requires turtles to be handled in ways both humans and turtles seem to find uncomfortable where there is a great deal of resistance involved. When recalcitrant turtles and humans meet, they are both transformed through this act. Prompted by these observations, I ask; how should one understand these meetings? On what level does the practice of washing shape humans and sea turtles, and what are the consequences for how one should understand the work volunteers do in Saving Turtles? Furthermore, as a practice that is repeated with regular intervals to ensure that turtles remain clean, how should one understand the iterated character of this practice?

As I will attempt to show, sea turtles and humans should not be understood as actors with predisposed ontologies, but they are being formed ontologically through the relation-forming practice of washing. In addition, the intervals between different washing sessions shows how

it is a fundamentally open practice that sits within other naturalcultural cycles that lie outside the mere confines of the turtle-hospital.

The rehab-centre

Today it is time to clean the turtles in the turtle hospital in Portsmith, a suburb of Cairns. This hospital is situated in the industrial part of the city on the north banks of the Trinity Inlet, a brown muddy river surrounded by mangrove forests. South of the river, lush forest-covered mountains overlook us. The hospital itself lies next to a ship wharf and a construction site, emitting loud noises and a faint smell of oil. In fact, this is an ample setting as turtling is dirty and requires hard labour. Today, one of the two leaders in Saving Turtles; Matt, has called in a couple of the volunteers for a turtle washing session. A surprisingly international crew turns up; two local students in their early twenties, Yvonne and Josie, a young backpacker from England; Simone, and Dieter and Christian; two thirty-something german brothers working and living in Cairns. We are all standing outside the “office” around 4.30 this afternoon awaiting instructions from Matt.

The “office” is an old shipping container complete with a desk, a fridge filled up with squid, which is used for turtle food, and a variety of tools that are used in the maintenance of the turtle centre. The container sits between two fenced off areas, each about fifty square meters with round tanks and tubs of different sizes standing packed together. Inside them, sea turtle's of various species, ages and sizes are swimming with plastic sheets are stretched over the tanks to provide shelter against the scorching tropical sun and the occasional rainstorms that pass through.

It all looks rather improvised, yet sturdy; the result of constant repairing and improvement on the part of Matt. Always short on funds, Matt and some of the other volunteers routinely collect bits and pieces that are needed in the turtle centre wherever they can find them. Many of the tanks in the rehab-centre have been found in garbage dumps or on roadsides giving it a charming make-shift look. As Matt works as a marine biologists in an aqua-culture research project that aims to farm cray-fish, many of the more expensive devices in the centre, like pumps and filters, are discarded pieces from his work place that are recycled and put to use in Saving Turtles' hospitals.

While the turtles in this hospital usually get washed once a month, with the onset of the wet-season the frequency of cleaning has to be stepped up. As I have learned from the other volunteers, when heavy rain swells the Trinity Inlet it carries with it mud and sediment from the surrounding landscape which is then subsequently pumped into the tanks in the rehab-

centre. Although this water runs through a system of filter bags that are changed and cleaned by the volunteers every day, the tanks still fill up with sediment as well as unwanted organisms. With the wet season lasting from around december until march, chemical run-offs from farms in the area lead to algae blooms that eventually starts growing on the turtles. Eventually, this weighs the animals down as mud gets stuck in the algae which is highly stressful for animals that are already sick.Thus, ridding turtles of algae is vital for getting them healthy.

As we walk amongst the tanks in the centre, some of the turtles give off the impression of being covered in fur as their shells are covered in algae. After checking that all the pumps are working and that everything is in order, Matt leads us over to one of the middle-sized tanks, about two meters in diameter, where we look down on a small green sea turtle with plenty of algae sitting along the sides of its shell. It seems somewhat agitated by our presence and starts swimming around in circles, not that a round tank allows for much other movement. Like other green sea turtles it has an oblong shaped shell that ends in a pointy corner. While green sea turtles are known for their conspicuous patterns of brown and black hues over their hexagonal shell pieces called “scutes”, this one has its shell covered in threads of brownish algae waving in the ebbs and flows of the water as it moves around. Matt wants to start with this one.

Lifting and washing techniques

To wash a turtle you need first to pick it up and out of the tank, although this is easier said than done. As Matt shows us, this requires skilled technique. Sea turtles are recalcitrant critters. They can bite and they certainly try to get out of your way if you ever want to clean them. This makes them hard to catch and somewhat dangerous to handle, for humans and the turtles themselves. When you pick up a turtle you risk dropping it on the ground. Once a turtle is out of water its normally slow-beating flippers speed up and strike with astonishing power. An otherwise slow-moving animal turns into a frenzy of beating flippers and rambunctious head movements. To ensure that neither humans nor sea turtles get hurt necessitates one adopts a special technique that Matt has refined after years of picking up turtles from the tanks in the hospital.

While we attentively observe, he slowly lowers his hands in the water and waits until the turtle is somewhat calm. Then, when the turtle gets close enough he grasps around the turtle with his fingers under its belly and the thumb clamping down on top of its shell. “Your fingers have to be placed precisely at the middle of its body” he tells us. This way you avoid the turtle's flippers as they flap up and down preventing you from getting hurt by a small claw on

their flippers that might leave you scarred should it strike you. Matt picks the turtle out of the water and it immediately starts flapping ferociously. With skilled movement; Matt carries the it over to a large black plastic crate on the ground. This is where the washing will take place. Before we start with this one however, Matt wants me to try.

To prevent the turtle from slipping out of my grasp Matt makes me don rubber gloves to give me a firmer grip. We move over to a tank with another green sea turtle, a juvenile that is slightly smaller than the last one. When it swims close enough, I clasp my fingers around the sides of its shell and hold it steady. As I lift it out of the water, its beating flippers shower me and the other volunteers in water. I instinctively hold it away from my body to not get hurt, but the turtle's weight and its slippery shell causes me to tilt forwards and I nearly drop it before I get to the plastic crate were it will be washed. It requires quite a balancing act to be able to do this properly.

In the hospital, turtles are washed in large black plastic crates. This is handy as it keeps them in a confined space and allows us to carry them around. In these crates, wet towels cover the bottom, “it makes the turtle feel more comfortable” Matt tells us. Now that the turtle I picked up is in the crate, a wet towel is placed over its head. As Matt shows us, by covering the turtle's eyes it calms down which stops it from desperately trying to get out of the box. It also weighs the animal down slightly which stops them from moving around too much. Although this is supposed to help, this turtle does not take lightly on being taken out of water and refuses to settle down. It lifts itself up with its front flippers while Yvonne and Josie push it down hard to hold it still. Even though two people are pushing it down it still manages to jerk its body up and down.

When the turtle finally settles down after a few minutes, Yvonne, and I get down on our knees and start rubbing the turtle's shell with black *scrubbers*; hard plastic sponges that are particularly apt for rubbing away defiant algae. We start scrubbing by moving our hands in short rapid circles. Josie regularly squirts water on the turtle's shell with a hose to flush away what comes off. As the algae comes of, it emits a stale and salty ooze. This also gets Yvonne and me wet in the process. As this is repeated, it slowly gets rid of the top layer of mud and algae. Little by little, a light brown hue appears as the shell is cleaned. From being covered in dirt it morphs into a new turtle as more mud and algae gets washed off. The turtle clearly feels what we are doing. It lifts its head up as if in pain and makes snorting sounds from underneath the wet towel. When we scrub extra hard to get rid of the last bits of algae, the turtle once again tries to get out of our grip by lifting its body up.

It is clear that washing turtles involves quite a bit of power exertion on behalf of the

volunteers which make some feel uneasy. Yvonne and Josie are worried the wet towel over the turtle's head might impede its breathing and that we are hurting it by pushing it down. Yvonne seems to try to balance between scrubbing the turtle as gently as possible to not hurt it, while also getting the job done which requires rather ruthless handling. Seeing Yvonne's discomfort, Matt reassures us that sea turtles can take a bit of rough treatment, and that cleaning their shells is necessary to make them feel comfortable in the long run. Although, he also points out that what we are doing really is stressful to the turtles and that some of them might stop eating for a while after being scrubbed free of dirt. This is partly why we are doing this in the afternoon; the turtles have been given their daily amount of food consisting of cut up squid. This ensures they have some nutrition in them should they stop eating afterwards and it gives them time to calm down until their next feeding session.

Entangled volunteers and turtles

The everyday encounters within the turtle hospital like this one, is certainly more mundane than the overt spectacle involved in a turtle hunting controversy. However, this does not mean that they are of any less significance. The repeated bodily routines involved in turtling, like cleaning filter bags, cutting up squid, or getting wet and dirty while cleaning a turtle, represents the crux of the volunteer chores in Saving Turtles and is in many ways what make the volunteers feel like they are doing something worthwhile. While helping Matt out in the rehab centre, he would sometimes jokingly tell me stories of backpackers who came to help in the organisation, but left as soon as they experienced the strenuous work it actually involved. For many of the volunteers, the hard physical work, the sometimes boring routines and the ability to put up with this was seen as what separated them from people who wanted to help sea turtles in name only. Cleaning turtles is an important practice for the volunteers in the way it represents an encounter between humans and sea turtles where volunteers get to see how their work makes a visible difference. After, scrubbing makes the turtles clean. It works as a transformative event where a sea turtle is transformed from a drab and dirty looking animal to a colourful and shining critter, and possibly a tired one depending on its level of resistance to human handling. Humans are also transformed in this event. Scrubbing is strenuous. To get rid of algae, scrubbers are used with great effort, hands going at it in fast circular movements making both your hands and arms sore. The water used to hose the algae off the turtle's shell makes it impossible to stay dry, and bending down on the damp tropical ground makes it a sweaty and dirty affair. So during a cleaning session, both humans and sea turtle bodies are transformed and shaped by the practice in which they take part.

Donna Haraway and her grounded philosophical contemplation on dog-human relations in “When Species Meet”(2008) has sharpened my gaze and interest for what goes on in these

everyday encounters between humans and sea turtles. What goes on here might be more interesting than what meets the eye. In fact, to understand this through what one observes *visually,* might be the wrong way to analyse this encounter. Cleaning turtles is above all a tactile encounter between hands, shells, scrubbers, algae, mud and water which I learn to understand through taking part in this practice myself, with my own body and sense of touch. During the rowdy and highly physical efforts to make a turtle lie still, human and sea turtle bodies are meeting and entangling in multiple ways. A relation is formed between them, a relation that is mediated through other relations with scrubbers, towels, plastic crates, mud, water and algae. Yvonne and I feel the turtle's shell with the use of scrubbers and hands, and we feel the top layer of mud and the resistant algae underneath when trying to rub it away with great effort. Likewise, the turtle feels the hard scrubbers when we forcibly push down on its shell and raises its head in discomfort. From the Sarah, I have learned that turtles have nerves close underneath the hard exterior of its shell. The use of a wet towel over the turtle's head and its visible discomfort also affect Yvonne and Josie who fear we are hurting it, making them trying to adopt a gentler way of scrubbing. Multiple senses are at play here; sight, touch, smell, as well as emotions, dispersed across species lines and where these sense slide into each other where it makes little sense to separated clearly between them. This resembles Eva Hayward's notion of *fingeryeyes* in the way it points to the amalgamation of visual and tactile senses inherent to this encounter(Hayward 2010).

This ethnographic moment speaks of how a volunteer in Saving Turtles is always involved in a doing. His or her identity as a volunteer does not make sense without doing volunteer chores, without the act of *turtling.* Seen in this way, a volunteer in Saving Turtles is always a becoming, and more than that it is what Donna Haraway calls a *becoming-with*, an identity always suspended in relations with other kind of human and sea turtle selves(Haraway 2008). In that way, the repeated practice of cleaning turtles which is undertaken at regular intervals in the rehab centre, can be seen as a mundane ritual that materialises the volunteer identity in relation to sea turtles, as well other things, like scrubbers, wet towels and water hoses(Singleton and Law 2012: 3). They are enacted through a cleaning session.

This way of framing what goes on here eschews any clearly delineated boundaries between humans and animals. The human volunteers who take part in this doing are here fundamentally entangled in the sea turtles they wash. Their movements and actions depend on the actions of sea turtles. So while it is obvious that turtles are being transformed in this event when they go from being dirty to clean, human volunteers are also formed in. When becoming-with the recalcitrant sea turtles, the volunteer's identities should here be understood as inherently situated in this specific timed and spaced situation, and not defined by any

predisposed essence. While both the sea turtle and humans in this account have histories prior to this encounter, the practice of washing is nevertheless a *re-doing* of them both that must be explored through this particular situation(Haraway 2008:25).

So while this enacts a volunteer identity, it also enacts sea turtles. The sea turtle that gets its shell cleaned is also becoming-with through the relation-forming practice of washing, where hands and scrubbers are used to forcibly hold it down while it tries to resist human handling and where mud and algae defiantly stays put when volunteers tries to scrub it away. In that way, both humans and sea turtles are here becoming-with in the relational network that is formed by the practice of washing where associations are formed between various critters and things.

This understanding of what goes on during a turtle wash resonates largely with Actor Network Theory where actors, both human and non-human are seen as effects of relations. Michel Callon, with his groundbreaking article on scallops and fishermen provides some useful devices to understand the practice of washing turtles by arguing for a principle of generalised symmetry, agnosticism and free association where one refuses to decide in advance on ontological divides or on what actor is one should focus on in a course of action(Callon 1986:1). Likewise, Latour with his call to "keep the social flat" inspires me to flatten out any assumed hierarchical differences between humans and sea turtles that I one might take to be self evident(Latour 2005: 165).

However, while this helps us to understand turtles and volunteers as relational effects, and helps me focus on sea turtles and things, in addition to humans, the flattened understanding of the social that ANT encourages us to think with methodically, can perhaps fail to really capture the thickness of the relations that are formed between them. As argued by Ingold, while the methodological tools in ANT helps us focus on entities and their associations in a network, this can overlook how stuff we might not think of as concrete entities, like air or water, are forces in which these relations are immersed and allowed to function(Ingold 2011: 92-93). The relation-forming practice of cleaning turtles is mediated through stuff that does not necessarily hold together that well, like slimy algae or viscous mud, incongruous stuff that can be missed by applying the word entity.

Through algae and mud, cleaning turtles becomes full of glitches and friction. Matt tells me of instances where volunteers have dropped turtles on the ground when they have tried to pick them up because of the slippery algae on their shells where the animals have ended up being hurt. Likewise, the muddy ground makes it important for the volunteers to tread carefully when picking up turtles as they can easily slip and fall. So cleaning does not always work as it

“supposed” to, and is never smooth, but resistance from algae, mud and turtles makes the practice of cleaning characterised by a specific relational *texture* where friction is integral(Lien and Law 2012).

So while turtles and volunteers can be seen as becoming-with each other in the practice of cleaning, to account for the frictions and resistance created by mud and algae, and the corporeal encounter between moving turtle and volunteer bodies, it is perhaps more fitting to say that they are becoming *through* this relational texture that is formed in the meeting of mud, algae, towels, hands, shells and water. This means I do not see turtles and human bodies as defined by any predisposed ontology, but as bodies that are materialised through one-another in what Karen Barad calls *intra*-action(Barad 2007: 132). Barad here puts emphasis on intra, meaning through, instead of the more commonly used inter-action, which she claims connotes discrete bounded objects and subjects in relation to each-other. Seen through the analytic of intra-action, the ontologies of sea turtles and human volunteers do not precede their relations, but must be understood as inherently produced out the intra-active practice of washing, where turtles react to human handling and humans react to the actions of turtles. Their ontologies are inherently entangled.

This understanding of the effects of turtling, where both human and sea turtle ontologies are enacted through one another, has consequences for one should understand the work humans do in the rehab centres. If the practice of cleaning turtle shells produces human ontologies, through other beings and things, then the work carried out by volunteers in Saving Turtles should be understood as something more than a purely human set of actions. While work, or labour is often understood as *intentional* human acts, and seen as something with the capacity of changing the purportedly passive stuff of nature, this can fail to notice how things, materials or animals might effect humans on a fundamental level when this work is carried out. Understanding the work volunteers do as a form of iterated intra-action, then this notion of work is altered to include other non-human things and critters and takes into account the *unintentional* effects of this work where animals such as sea turtles shape human ontologies. As argued by Barad, the notion of intra-action also eschews any structure of cleraly delineated causes and effects which is integral to this understanding of work. This would discern human volunteers as bounded entities where their actions are the cause that works to transform turtles, seen as its effect. However, if humans and turtles are both being shaped through their iterative intra-action, then the effects of this work is much more multi-directional and ambiguous than any clear separation of cause and effect would suggest(Barad 2011: 146).

Repeated cycles- The poetry of cleaning dirty turtles

Understanding a cleaning session as a from of intra-action and something characterised by a certain texture sheds light on what goes on within the rather confined space of the hospital walls. However, to not give off the impression that this is a closed system, it is important to underline how cleaning is a fundamentally open-ended practice that is nested within broader naturalcultural cycles that go on outside the rehab centre. The iterated practice of cleaning turtle shells can thus be seen as a form of *poetic figuration*. Etymologically, poetry comes from the greek word *poiesis*, which means an action which transforms and continues the world, and is thus a verb, a doing[8]. This resonates with what I want to convey here. There is a certain poetry inherent in the mundane practice of turtling, in the repeated manner in which its done and in the recurring doings and saying that volunteers and sea turtles take part in. Like the repeated rhymes and sentences of a poem and the world it invokes, turtling involves practices that are repeated in similar yet always slightly different ways.

Some practices are repeated each day like the cleaning of filter-bags and the cutting up of squid and feeding. The practice of cleaning turtle shells, come and go over bigger spans of time, perhaps only once a month, or during the wet season, every second week or more when algae blooms make the water dirtier than usual. So the repeated practice of cleaning turtle shells is connected to other repetitions in the form of natural cycles; in seasonal weather patterns and algae blooms. These are again connected to the use of chemical fertilisers in the sugar-cane farms along the Trinity Inlet which means that farming practices are also present here.

What this makes clear is that the practice of cleaning turtles is nested within a much broader system of naturalcultural cycles that are again nested within each other, intersecting and diffracting, *continuing* and *transforming* a world. This relates to what I mean by the open-ness of the practice of cleaning turtles. It relates to and is contingent upon other cycles, other non-human critters, things and their agencies that lie beyond the mere confines of the turtle hospital. By analysing how turtles are cleaned, my goal is here merely to suggest some of the complexity it might be nested within. These cycles might change and interfere in other ways giving other results. So what I am getting at here, is that these recurring cycles should be seen as a form of poetic figuration where humans and turtles figure and are figured. Turtling, here in the form of cleaning turtle shells, is a nexus of recurring cycles that shapes turtles and humans ontologically. However, through these repeated cycles, their ontologies are never finished, but always transforming through their iteration. This point resonates with Deleuze's argument about repetition in Difference and Repetition(2004). Although repetitions are

8 This definition of poiesis is taken from wikipedia accessed on http://en.wikipedia.org/wiki/Poiesis

similar, what is repeated are not endless copies of human and sea turtle ontologies, but above all a repetition of *difference*, of becoming something else in the process of repeating, their ontological identities always changing slightly with each new repetition opening up paths for many possible transformations(Deleuze 2004: 24). Their ontologies are thus fundamentally nomadic, in process, and always changing into something new.

Conclusion

I have here discussed how one should understand the encounters between humans and turtles with a focus on the practice of cleaning turtle shells. Through a cleaning sessions, turtles and human ontologies entangle and become through one-another. As this is iterated, ontologies change ever so slightly as a form of poetic figuration, and I have here argued that this is connected to broader naturalcultural cycles. Touching on an iterated practice like turtle washing and its ontological effects, brings me over to the next chapter which concerns itself with the treatment of turtles with floaters disease. It should perhaps be noted that attending to the turtling as a form of intra-action, is in effect to counter any dialectically or teleologically informed heuristic for understanding how humans and turtles shape each-other. As should be clear from the previous discussions, it is much more fragile and open-ended than any structure of thesis, anti-thesis, synthesis or a clear envisioned *telos*- a finished product, a goal, would suggest.

Chapter 4: Floaters disease; treating Charlie

In this chapter, my discussions build on the discussions of the previous chapter and delves further into a world where fixed ontologies and causes and effects are thrown into confusion. As caring for animals in Saving Turtles is done with a clear goal in mind; to release turtles sound and healthy back into the sea, where they are envisioned as going through stages from sick to healthy, there is a strong teleological current running through this work. By focusing on a common disease that effects turtles; floaters disease, I aim to explore moments where this perceived telos is disrupted, when something does not work according to plan and when the volunteers are faced with an uncertain future. I here tell the story of Charlie, a green sea turtle who suffered from floaters disease, and show how uncertainty relating to different interpretations of a turtle's condition is integral to rehabilitation in Saving Turtles. Treating turtles with an uncertain disease often leads to improvised ways of caring. When it is obvious that a particular way of caring does not work, or a turtle's condition suddenly turns worse, the volunteers in Saving Turtles are faced with moments of uncertainty where many possible outcomes present themselves and where there might be disagreements over what assumed future one should act upon. Grounded in this observation, I ask; how to understand those possible, assumed trajectories into the future that do not manifest themselves but nevertheless affect the world in the present? Or, more attuned to the specificities of Saving Turtles, how do differing assumptions and interpretations about how a turtle's disease might turn out, affect turtle ontologies in the present?

I here argue for seeing *non-coherence* and *mess* as important aspects of the caring for and rehabilitating turtles(Law 2004: 58, 92). This means I take the differing interpretations of a turtle's disease, and the elusive character of floaters disease not as something which *appears* elusive and uncertain to humans, but as part and parcel of reality itself. As I will attempt to show, an uncertain future can have worldly ontological consequences in the present. Building on this, I show how efforts put in place to rid Charlie of floaters disease where a Cat-scanner is used, does not give more certainty in relation to how to treat floaters disease, but leads to uncertainty at a different level and a moment where multiple, seemingly incompatible enactments are present at once.

What is floaters disease?

While working in Saving Turtles and asking Matt, Sarah or the other volunteers about the conditions of individual turtles and what they suffered from, the word *floaters disease* was often mentioned. From what I was told or overheard, it seemed to be the most common disease affecting the animals in the hospital and something which appeared to be adamantly

difficult to treat. Sarah, who ran a veterinary clinic with her husband, explained floaters disease to me as a disease that can be caused by a variety of different things, but which ultimately stems from gas building up inside a turtles body which becomes trapped under its shell. The ingestion of so called “foreign objects”- small bits of plastic or fishing line or even something as banal as stress, can lead to a blockage in a turtle's intestines. This prevents food from passing through their system causing a build up of gas which makes the affected turtles float on the water-surface unable to dive down in the water to feed on sea grass, which is their main food-source. As a result, in the ocean, by starving and becoming weaker, turtles that suffer from floaters disease are highly prone to predation by sharks or crocodiles or from getting hit by boats.

So from what Sarah tells me, it seems that floaters disease is less a single unified disease than a symptom that can be caused by a variety of different factors. So why call it a disease? As pointing to the exact cause of why a turtle is floating requires the use of expensive technology, calling it *floaters disease* is a quick way to point out the immediate problem at hand, that the turtle is floating. However, while a floating turtle indicates floaters disease, as this can caused by a variety of different things, ridding turtles of floaters disease is fraught with uncertainties and debate between volunteers over how to best treat these animals.

In Saving Turtles, floaters disease is something volunteers talk about and deal with daily through their caring practices. Similarly, from visiting other organisations in Queensland that work to rehabilitate sea turtles, ridding turtles of floaters disease seems to be the main focus in this work. For national park rangers who patrol the coastal areas outside Cairns, finding a floating turtle constitutes as a sufficient reason to catch it and bring it in for rehabilitation. In Saving Turtles, no animal is released back into the ocean before it stops floating which can sometimes lead to individual turtles being confined to a tank for years if floaters disease persists. So this disease is undeniably an important issue for the people in many different “turtle organisations” as well as for the animals themselves. It contributes to landing them in these rehab-centres and is certainly a question of life or death.

Charlie

A couple of months into my fieldwork a green sea turtle by the name of Charlie got critically ill. At the time I started doing fieldwork in Saving Turtles, Charlie had already been confined to a tank in the rehab centre for a couple of months and had become a particularly loved animal among the volunteers who cared for him. Compared to many of the other turtles enrolled in the rehab centres, Charlie was bigger and older. Believed to be around fifteen to twenty years, he was big, but still considered a juvenile, meaning not yet sexually mature. As

it is hard to determine a sea turtle's gender before they reach sexual maturity at around thirty years of age, no one knew if Charlie was actually a boy or a girl. The name Charlie was therefore arbitrary, yet for the volunteers who cared for "*him*" it was a way of personalising their encounters with this animal. Charlie was for them not just any green sea turtle, but a specific turtle with individual dispositions and attributes that they cared for, a turtle with personality, and certainly a boy. The fact that Charlie was said to be a particularly cheeky and mischievous turtle contributed to giving him a male name. He would approach people who stood by his tank to be scratched on the rear end of his shell in between two barnacles, or try to snap food out of the hands of volunteers during feeding sessions. Placed in a tank about five metres in diameter together with another green sea turtle about the same size and age; Barney, Charlie was a welcomed addition to the turtle centre which mostly cared for younger and smaller sea turtles. Charlie and Barney were well known among all the volunteers and seemed to be doing well until Charlie suddenly turned for the worse.

Floating and healing in the rehab centre

Both Barney and Charlie suffered from floaters disease when they were taken in to the turtle hospital, although Charlie also had other injuries troubling him. From Matt, I learn that Charlie was found floating on the ocean surface with fishing line sticking out from his rear end and with a large part of his shell missing on the right side of his body, suspected to be from a crocodile or shark taking a bite out of him. He was picked up by national-park rangers patrolling the marine park zones outside Cairns who transported him to Saving Turtles. Placed in the hospital, Matt and Sarah removed bundles of fishing-line from his bum which seemed to help on Charlie's overall condition. However, after initial improvement, Charlie continued to float and after a couple of months Sarah worried that he was beginning to deteriorate slowly.

I here turn to an empirical excerpt from the time when Charlie turned worse which exemplifies how the volunteers interpret and assess the condition of the turtles with floaters disease as well as it sheds light on the personalised encounters between a turtle and a volunteer that feeds into how floaters disease is interpreted.

Today I am turtling in the rehab centre on Fitzroy Island with Tess, a woman in her sixties who has volunteered with Saving Turtles for a couple of years. Being a pensioner, Tess has time to volunteer four times a week and probably spends more time with the turtles than any other volunteer in the organisation except for perhaps its leaders. After working with Tess on many occasions, a natural rhythm and division of labour has evolved between us that we both seem enjoy. I usually do the physical and dirty work of cleaning the filter-bags with the high-

pressure hose, while Tess prepares for the feeding of the animals; thawing the frozen squid and cutting it up in turtle-mouth-fulls and removing any droppings from the tanks before the turtles are given food. As we work away from each other, I occupied at the cleaning station where I turn the filter-bags inside out to wash off the dirt, and Tess over by the sink at the other side of the centre, busily cutting up squid, we do not talk much apart from a few utterances here and there. Any small-talk between us is muffled over the sound of the water being pumped into the tanks. While I remain mostly quiet when we work with each of our allotted chores, Tess engages in talk with the other turtle-selves present in the rehab centre. Along with many of the other volunteers, Tess is particularly fond of Charlie and Barney who she talks to every time she works in the centre. She routinely leans over their tank and talks with them in a high-pitched voice, like that you would use when talking to babies.

When I come over, Tess says she thinks Charlie is doing a lot better than the last time she was in to check on him a couple of days ago. We walk over to his tank. Charlie swims lopsided with the right side of his shell popping out of the water and his left side tilted downwards. As well as impeding his ability to dive down in the water the floaters disease also hinders his breathing. To breathe he has to lift his head sideways out of the water putting strain on the side of his neck where the skin meets his shell. As a result, a large pink lump has developed on his neck after repeated efforts to breathe with his head in a strained position. While also floating, but not as badly as Charlie, Barney lies straighter in the water which seems more comfortable. Compared to Charlie, he has fewer visible traits of damage and disease.

Tess wants to play with Barney and Charlie- "wanna do a helicopter?" she asks with her silly high-pitched voice. When Charlie swims close she grabs hold of his shell and holds him still for a few seconds while he wriggles from side to side trying to get out of her grip. She then pushes him forwards in the water and he cruises along without beating his flippers while Tess exclaims "weeeee". This is repeated with Barney. From what I can tell, both of the turtles seem to like it as they time after time come back to Tess."It gives them a bit of distraction" Tess says, and I cannot help but think it distracts her as well, she obviously loves doing this, scratching, touching and playing with the turtles. We sit down for lunch and talk about Charlie. Tess is certain that he is doing a lot better and thinks that we should not worry about his condition. Compared to how he was a coupe of days ago, he seems better and even well enough for helicopter rides she says.

Later in the day, Sarah comes over to check how Charlie is doing. Tess tells her what she thinks while Sarah assesses Charlie. Sarah concentrates while Tess is talking, carefully monitoring his movements and behaviour while almost ignoring Tess. When Tess is out of sight, Sarah and I stand around Charlie's tank and I try to grab Charlie for a "helicopter

ride" like Tess does. Sarah grabs my arm and tells me to stop. "Don't do that!...When a turtle is that sick we try to to put as little stress on it as possible"- she tells me sternly -"I just didn't have the heart to tell Tess, I don't want her to think she is doing it wrong". After this, Charlie suddenly seems a lot sicker. "Your feeling sick aren't you Charlie"- Sarah says while patting him gently on his shell. I feel

Friction and uncertainty

This empirical excerpt shows how different people in the rehab-centre often have widely different interpretations of a turtle's condition which can sometimes lead to moments of friction. It is also telling for how I interpret Charlie's behaviour in relation to the people I am with. When Tess is playing around with Charlie and Barney, I see them as healthy turtles that are soon to be released, but when Sarah comes along and tells me to stop touching Charlie, I feel embarrassed for having stressed a turtle that Sarah tells me is actually very sick. Neither Tess nor I felt there was much to worry about in the way we were handling the turtles, before Sarah arrived. Being a veterinarian, it is reasonable to say that Sarah has a more skilled vision for the subtle signs of disease and unnatural behaviour than Tess. So does this mean that Tess and I were just engaging in what we often call anthropomorphism? Well, that might be the case. To say that Tess and I project feelings and desires onto Charlie which inform how we interpret his condition is probably a part of what is going on here. However, the very word anthropomorphism tends to give off negative connotations, as if we are wrong in this affective engagement with Charlie and Barney. In a way, this seems like the case, as Sarah, a person with more authoritative knowledge on this, implicitly tells us that we are wrong in thinking Charlie is happy and doing well and that we are hurting him by grabbing him by his shell and pushing him through the water.

As Candea discusses in relation to human-meerkat encounters in a science project, what he, the anthropologist at first glossed over as anthropomorphism, can more correctly be thought of as a careful balancing act between engagement and detachment from the animals in question(Candea 2010: 12). Referring to Kay Milton, he notes that anthropomorphism is often thought of as the mistaken attribution of human like features onto animals, but that this should be separated from *ego*morphism, in the meaning that humans understand other animals through themselves, through a sense of familiarity that does not necessarily imply a mistaken projection of human characteristics onto animals(Candea 2010: 15) Likewise, Haraway takes up the issue of play between herself and her dog and argues that not writing this in "anthropomorphic" terms, is in a way less accurate, and certainly more impolite and inattentive to her dog's readiness to engage with her in play(Haraway 2008: 242). This points to how calling Tess playful engagement with Charlie and Barney anthropomorphism can

overlook important aspects of how turtles might be playing back so to speak, by swimming up to humans to be scratched or touched and how the way volunteers empathise with and care for turtles necessarily involves a good deal of interpretation from one's own point of view.

Although what Sarah tells me raises doubt as to whether Charlie is enjoying the engagement by Tess, this was undoubtedly the case with other animals in the centre who actively swam up to humans to be scratched on their bellies or shell and wriggled back and forth at the touch of a human hand. Furthermore, parsing this as anthropomorphism can also lead us to turn a blind eye to the ambiguous character of floaters disease and the work of assessing a turtle's condition in the rehab centre where many interpretations are always present at once. Uncertainty as to how to care for turtles successfully and the improvisation and tinkering[9] that is part and parcel of caring for turtles, constantly lead to these kinds of frictions, of differing and competing claims where volunteers engage with turtles to understand how to move forwards. How should I understand these kinds of frictions, these different interpretations, and how should I analyse them?

I could say that there is one reality here, that Charlie was *actually* sick all along, that his condition was always deteriorating and that Tess was wrong in her belief that Charlie was doing better. As Charlie eventually ended up dying, this would not be a controversial thing to say. This brutal fact seems to speak for itself. Tess' interpretation of Charlie's behaviour as a signs of improvement clashed with Sarah's belief that he was doing worse. Does this mean that one line of reasoning represents reality more correctly than the other?

At least Sarah's line of thinking predicted a trajectory in which Charlie would get worse and could potentially die. But, posing the question of whether Sarah's thoughts are more in line with *reality* than Tess', overlooks some central aspects of how turtles are being treated in practice. This places me within the confines of what John Law calls a “one-world-world”, an envisioned world in which are many different representations of reality, but only one real, physical reality(Law 2011). This metaphysics ultimately makes us think of uncertainty and ambiguity as a product of human epistemology, of differing viewpoints and perspectives, and not something inherent to the seemingly cold material world itself.

The problem with this question then, is that it puts me at odds with how to incorporate the uncertainty integral to the pondering in these kinds of situations. In a moment of indeterminacy, there are many possible futures that must be taken into account for the people in Saving Turtles and people might have different opinions pertaining to how to care for a sick turtle. During my fieldwork, I experienced many such instances of different opinions and

9 In thinking about this as tinkering I take inspiration from Mol, Moser and Pols(2010).

arguments about what to do with a turtle; should it be euthanised or not? Should we fasten a satellite tracker on it or not? Should we treat it this way or that way? The fact that there were two leaders with very different personalities in the organisation and no written manual on how to treat turtles, but rather constant improvisation and tinkering, can account for many of these frictions.

So instead of determining who is *right*, I argue for seeing this uncertainty and friction between differing interpretation as an important part of caring for turtles in the rehab-centres. This involves taking seriously the world that comes out of indeterminacy, from a point of disjuncture where the path you choose forwards have worldly ontological consequences. The reality that presents itself when Charlie is objected to differing interpretations and being handled in different ways by different people is a fuzzy affair. Assumptions about how things might turn out have ontological consequences in the present by informing what treatment an animal should be given, and thus what kind of relational assemblage it is to be embedded in. Thinking that Charlie is better suggest one changes nothing, thinking Charlie is deteriorating suggests one tries to intervene in some way or another.

Writing about the wider methodological implications that present themselves in an ethnography of spam filters, Paul Kockelman develops the notion of the *sieve*; a sorting tool that makes certain assumptions about how the world is, but which also shapes that world by sieving information or materials which might take on the form of the sieve(Kockelman 2013: 36). In line with his thinking, the different interpretations of Charlie's condition can be seen as two different sieves which shape different ontologies by presenting two different ways of moving forwards. But does this mean that there are two ontologies present at once? I strike at seeming paradox here with the word ontology. It might connote something more certain and fixed than what I am trying to sketch out here. At an impasse between two interpretations it is easy to think that one is more right than the other where right comes to stand for closer to *reality*. While it should be noted that Sarah's interpretation of Charlie's condition was perhaps better suited to save him, given that he soon afterwards turned worse, my aim is here to stay with the uncertainty that comes out of such a moment when two different trajectories into the future present themselves as a kind of ambiguous, fuzzy turtle-ontology that is real. The virtual[10] character of the possible futures that do not manifest themselves, are nevertheless real, part of a moment of friction, a disjuncture, a fork in the road, and something that must be taken into account when analysing the how the volunteers of interpret Charlie's condition.

After that day, Charlie did turn worse and it was feared he could die. His floating was getting

10 I here think in line with Deleuze's argument in Bergsonism(1991) about the virtual as not opposed to material reality, but as actually real.

worse, he stopped eating and showed a marked change in behaviour by moving very little. Contemplating how to save him, Matt and Sarah discussed whether having Charlie x-rayed or scanned could be a good solution. As Charlie was initially found with fishing-line sticking out of him, it was thought that his deteriorating condition was caused by fishing-line still left inside him. It was therefore hoped that a scan could help determine the exact location of these objects which could open up for performing a smaller operation to get it out through his bum. Always seeking out new and better ways to heal turtles, Sarah hopefully contacted the (human)hospital in Cairns and inquired about the possibility of having a turtle x-rayed in one of their Cat-scan machines. To many of the volunteer's surprise, two radiologists agreed to help. One morning, Charlie was taken out of his tank, into a box, and transported into Cairns to be scanned.

Scanning

At 6:30 in the morning Pete and Neill arrive with Charlie on the back of a jute in the car-park underneath the hospital. Charlie is placed inside a wooden crate with wet towels covering his shell and head, barely visible through small round holes. Sarah has invited a man from Channel News Seven to film the scan and interview the ones involved, something the television station has willingly accepted. He has brought with him several cameras and numerous tripods and lamps to work with. Likewise, Pete and Neill who work together as photographers, have brought with them a heavy load of cameras and lenses to film the scan for Saving Turtle's homepage.

After some initial greeting and chatting, we lift Charlie out of his box and strap him onto a "stretcher"; a carrying device with two broad straps that we bind up on his back. Although it is a rather serious situation, we giggle when we see Charlie's head and flippers comically sticking out of the stretcher. With Charlie held between Pete and Neill, we walk into the hospital and take the elevator up the third floor. As it is still early in the morning, the halls are empty and everything is quiet. Scanning a turtle has to be done before the other human patients enter the building. Up on the third floor, we head into a room with a big white machine shaped like a fat tube with a bed in the middle; a Cat scan. Neill and Pete lower Charlie down on the floor in the hallway outside the room. He regularly lifts his head up to breathe, like he would have done if he was in water. In a room adjacent to the room with the Cat scan, two male radiologists by the name of Barry and John greet us. They seem exited and tell us how happy they are to be able to contribute with their expertise to help an animal in need. Sarah says she had little trouble talking them into doing the scan for free.

Sarah goes on explaining the two doctors about Charlie's condition, that he was originally

found with fishing-line sticking out of him, and that she hopes the scan will confirm if this is still left inside him."He was doing better for a long time, but then during the last week he has taken a turn for the worse so there might still be some fishing line caught in there" she says. The man from Channel News Seven has set up the cameras and is filming them while they talk. Neill and Pete are busy setting up a "slide" to put their cameras on which enables them to smoothly slide the camera back and forth while filming.

After preparing cameras as well as the Cat scan machine, Pete and Sarah lifts Charlie onto the bed that slides into the scan where they untie the stretcher he has wrapped around him. This is to provide the man from Channel News Seven with shots of Charlie without the stretcher, which he tells us looks better on TV. The stretcher is then wrapped around him again to make sure he is lying still while he is scanned.

The machine is now turned on and red laser lights align themselves with the bed and form a two crosses on each side of the machine. Pete quickly attaches a GoPro camera on the top of the machine to capture the moment when Charlie is scanned. Barry pushes a button that makes the bed slide into the machine and we all leave the room for the scan to be undertaken. Everyone crams together in a smaller room adjacent to the room with the scanner where we peer through a window that allows us to see through to Charlie. After a while a picture pops up on a computer screen that shows white lines on a black background which represents the inside of Charlie from a horizontal point of view.

The scan enables the doctors to slide back and forth between horizontal "cuts" of his body. They switch between sliding through a horizontal and a vertical scan of his body. Sarah and the two doctors examine the scan. For a while they do not say much, but point to different parts of the pictures they think are interesting and mark them off on the screen. John juxtaposes several pictures and compares them. They discuss what they see and confer with Sarah who is the turtle expert among them. They try to single out any oddities which is hard when you are not used to seeing scans of a turtle. One picture from the side shows a large black area underneath Charlie's shell. The doctors say this is most likely the air which causes floaters disease, Sarah agrees. They compare his two lungs and point out that one of them is clearly smaller than the other. The air trapped under his shell seems to compress the lung.

A picture is singled out as particularly interesting. Barry zooms in. The picture shows lots of little small circles enmeshed together. More discussing. Barry suggests it might be "washers". "yeah, that does look like washers doesn't it?" says John. Pictures from different angles of the area under question is compared. Under the pictures are several square figures showing pictures of human blood vessels, a heart and lungs and a spine with a ribcage. This

program is clearly not meant for scanning turtles. After discussing and comparing pictures, John suggests it might be small shells entangled in plastic or fishing line. Sarah thinks it might be barnacles growing around a piece of fishing-net. No final conclusion is made, but they agree that it most likely is some form of crustacean entangled in a plastic material, "but" Sarah say, "it could also be washers".

The scan has not given a decisive conclusion as to what might be causing Charlie to be sick. All that is known is that something is inside him that is not supposed to be there. I ask Sarah if it she will try to get it out and she says it is nearly impossible to operate on a turtle as you will have to open its shell which will most likely kill it "...but you could enter in through its bum, but it won't get out what is inside...". After packing up, Sarah and the radiologists are interviewed down in the hospital lobby. "Tell me about Charlie" the interviewer says- "when Charlie came in he was floating really badly...he was floating like this" Sarah says and illustrates with her arm "...and doing really badly, but after a while he started getting better".

To my surprise, Sarah does not note the fact that the scan does not seem to have helped Charlie much, or the fact that he is actually doing quite bad. Rather, she goes on to talk about her gratitude towards the doctors who donated their time to help Saving Turtles. Next, the radiologists are interviewed and asked why they decided to help Saving Turtles and Charlie. Barry, the oldest of the two responds- "animals don't have the same opportunities as humans when they get sick- so to be able to give turtles here opportunities is worthwhile". After the interview Barry and I chat about the scan and how different it was from scanning humans, "...you know, this is just like any other patient, almost, and we're curious".

Charlie multiple

What is going on here? While Charlie in the rehab-centre is for the volunteers a personalised and fundamentally whole turtle, when a a Cat scan is added to the picture, this complicates the matter. When he is slid into the scanner and pictures of his inside appear on a computer screen, a different turtle seems to emerge where a turtle's name and personal history does not seem to matter much, but rather parts of his inside. The boundary between Charlie's body and the outside world, that appears to be clear on the face of things, seems drawn in a different way. Furthermore, although this scene unfolds in a human hospital where, unlike in the turtle hospital, a high-tech device such as a Cat-scan can be used, uncertainty and ambiguity concerning Charlie's condition has certainly not gone away, but seems rather to have been reproduced at another level. While the uncertainty that is part of assessing turtles in the rehab-centre often revolves around singling out subtle signs of deterioration or improvement by watching turtles in their tank, in this situation uncertainty arises when x-ray scans of a turtle's

inside are interpreted.

Curiously however, this uncertainty does not seem to be interesting when Channel News Seven conducts an interview with Sarah and the doctors. As the scan failed to actually help Charlie in any way, which can be seen as a failure, this was not mentioned during the interview. No one asked whether this would actually help Charlie in the long run. While the scan produced utterly ambiguous results, the interviewer from Channel News Seven as well as Sarah and the doctors seemed to circumvent this matter. How to make sense of all this? How should I understand these different practices; scanning, filming, interviewing, where there seems to be different logics at play, where the uncertainty and seeming failure in the scan is effaced in the interview?

We can here discern two different enactments where different turtles are being done simultaneously. First, there is the enactment of Charlie where a specific cultural narrative is deployed. The man from Channel News Seven is interested in Charlie as a turtle with a particular history that can help him and the production team tell a story; about humans doing their best to help an animal, and about the rather exotic and rare case of a turtle being scanned in an expensive and complex machine intended for use on people. This is Charlie enrolled in a social and moral web. By filming Charlie's face and by using close up captions of him lying on the bed, the story encourages moral engagement. As the incident is shown on television later that night, a voiceover tells the story Charlie, Saving Turtles and its leader Sarah. What is highlighted are the people's commitment to helping an animal that is considered threatened; a green sea turtle. We learn that turtles are dying from human pollution, but importantly we are also told of the kind humans who give turtles a second chance.

So in this enactment, we are presented with discrete objects and subjects in a neat story about kind humans and a sick turtle. However, while this enacts Charlie as a turtle with a coherent unified body that we see as separate from the machine he is strung onto, as well as a turtle with a particular history and individual way of being, there is also a much less coherent turtle present here. The scanning of Charlie, where slides of his body mediated through x-rays which are shown as pixels organised into patterns on the computer screen makes for a very different turtle. Charlie's personality or individual dispositions do not matter here. What appears as a bounded object dissolves in favour of a more muddled animal where boundaries are drawn differently. When Sarah and the doctors try to interpret the pictures of his inside, the matter of concern is how to separate pieces of skeleton and organs from stuff that is not “supposed” to be inside him. The tasks involved do not centre on Charlie as an individual turtle per se, but are much more technical; how to use the computer program and the scanner properly when trying to find the correct slides to juxtapose and compare, and trying to

determine the nature of small entangled circles that might be *washers,* or something else. There is no bounded whole turtle here with a personal history, but a fundamentally disrupted critter in an assemblage with a Cat-scanner, a computer, radiologists, scans of Charlie's inside and uncertain interpretations. When Charlie is scanned, this is an enactment where only parts of Charlie matter, or more to the point; are made to matter(Barad 2003: 810).

The disrupted nature of this enactments can be seen in line with what Deleuze and Guattari has called rhizome; a metaphor taken from botany which denotes a type of roots that break up and connects in erratic ways(Deleuze and Guattari 1987) Taken as a metaphor for thinking and analysing, the rhizome implies moving underground to engage in *subterranean* thinking, away from what they call *arborescent*- tree like thinking, which they claim is occupied with descent, structure and clearly delineated forms. In contrast, the rhizome denotes anarchic movements where it is difficult to separate part from whole, centre from periphery or beginning from end. Taken as a rhizomatic assemblage, the relations between a Cat scanner, x-rays, slides of Charlie's insides and interpretations, is an enactment in which there is no absolute exteriority between objects and subjects, but rather erratic entanglements.

Non-coherence

Through these enactments, two different and seemingly incompatible turtles can be seen emerging. One that is enacted as personalised and whole, and one that is much more fragmented. This effectively renders Charlie multiple. Taken as relational effect, rather than a given, natural object, Charlie is a being that emerges multiply through different enactments that assemble different networks of humans and non-humans. So this is a moment where ontological multiplicity presents itself. However, to separate absolutely between these two qualitatively different turtles makes little sense. They are both there in the same room, they even emerge simultaneously and many of the beings present here contribute to both of these enactments, even though they seem to be incompatible. How should I then understand the relation between these two enactments?

Although disparate, the two enactments seem to follow in each others footsteps, one always close to the other. The doctors who run the machine and try their best to interpret the unfamiliar sight of a turtle's inside, so different from a human body, later during the interview turn to talking about how grateful they are for being able to help turtles by providing expertise and knowledge. Yet, during the interview, there are no question specifically about Charlie's diagnose or about how the scan might have helped Saving Turtles treat Charlie. So the seeming failure that is present in one enactment is hidden from sight and effaced in another, where the story is presented as a sunshine story, a success.

In thinking about the relation between these two enactments it helps to think with the term non-coherence. In “Modes of Syncretism Notes on Non-Coherence”(Law et al. 2013) a range of prominent STS writers argue for seeing all practices as *syncretic*. Different practices enact things, humans, non-humans differently in ways that are seemingly incompatible and non-coherent, yet different practices co-exist, not fluidly, but they tend to work in spite of their differences. They here identify several *modes of syncretism* that work to syncretise practices that do not readily stick together. These are ways in which people deal with the non-coherent character of reality. Annemarie Mol makes a similar point in her Body Multiple(2002). She shows how a disease like atherosclerosis can be part of multiple enactments that point in opposite directions, as a worsening condition in one enactment, and as part of the improvement in the overall health of a patient in another(Mol 2002: 136). Yet, these incompatibilities that inhere in these enactments do not have to lead to controversy as long as they are kept separate and made to matter in different sites at different times.

So, sometimes, there are techniques in place to keep practices separate. In thinking about this in relation to the scan, it is hard to say whether the effacement in one enactment of the failure in another is a conscious strategy deployed by Sarah, the doctors or the man from Channel News Seven. I did not ask about this when taking part in the scan that day, but in hindsight, one can ask why there seemed to be so little controversy concerning the seeming incompatibility of these two enactments. A possible answer could be that although the different enactments are present more or less at the same time, as in Mol's description of atherosclerosis, they are made to matter at different times. It should here be noted that although the scan had failed to help Charlie in any way, there was a feeling after the scan that we had all been part of something unusual. Compared to the tediously repeated chores undertaken by the volunteers in the rehabilitation centre, scanning Charlie in a human hospital was undoubtedly an exotic affair. So, while people most probably realised that it would be impossible to get out what was inside Charlie, Sarah, Pete, Neill and the doctors seemed happy after the scan, even relieved that everything had, at least on the face of it, worked out. In addition, one can ask whether being interviewed and filmed with the knowledge that this would be shown to a larger public, made people frame their actions in terms of a sunshine story about kind humans helping an animal in need where this overrode the seeming failure to help Charlie. The scan can thus be seen as a simultaneous success and failure, where these two very different aspects come to the fore at different times.

Partially overlapping ontologies

So, in conclusion, if there are two enactments present in the hospital room that day, enactments where two different turtles are being done, then these are enactments that connect

and overlap, despite their seeming incompatibility. Marylin Strathern's her term *partial connections* can usefully be applied in making sense of this (Strathern 2004). With ethnography from Papua New Guinea, Strathern highlights instances where wholes are disrupted. The individual in Melanesia she tells us, is a dividual, meaning it is dividable into many different people according to the relations it has in with other in-dividuals. The result is a kind of person where identity is understood as inherently multiple. While not completely reducible to one another, these identities are nevertheless connected, if only partially. This means there is no primordial identity, no essence, that lies beneath these other identities, but multiple identities partially connected to each-other.

The same can be said of the two turtle-ontologies that are enacted during the scan. The more *rhizomatic* turtle ontology that is enacted through the use of x-ray technology and pictures, is partially connected to the enactment of Charlie as an individual turtle with a history. For the scan to be undertaken and for Sarah to decide to do something extraordinary to help a sick turtle, it is perhaps necessary for Charlie to be a particularly loved turtle among the volunteers which makes him stick out. So there is certain degree of contingency involved here, but not in a simple straight forward manner. Charlie as a whole personalised turtle does not simply provide the ground onto which the other turtle can be enacted. They are both enactments in themselves that orders different logics of action and effects different ontologies.

This points to how one should understand the non-coherent and fuzzy reality that is integral to the work done to heal turtles with floaters disease. While this work produces different ontologies that do not cohere, these are sometimes partially overlapping despite their differences and incompatibilities, and as I have shown, different ontologies can be made to matter at different times and sites.

Chapter 5: Saving and controlling turtle lives

In the wake of the story about Charlie, a turtle that ended up dying despite numerous efforts put in place to *save* him, I stay within that same trope and discuss how death and power form an important part of saving and caring for sea turtles in Saving Turtles. I discuss a potent conundrum faced by the volunteers that I call *hurting-while-caring*; a seeming contradiction, and yet something which is deeply entangled in the ways turtles are being treated for the sake of their own *lives* and the survival of their species. As I attempt to show in this chapter, not only are the lives of turtles being cared for and *saved,* through rehabilitation and release back into the sea, but some animals end up dying as well, and sometimes practices are violently put in place to force sick animals to survive. I discuss this in relation to the Foucault's analytic of *bio-power*, to show how life is being controlled and shaped in Saving Turtles. Ensuring that turtle lives go on sometimes requires rather brutal physical handling of turtles. Rather than see this as opposed to the care and love the volunteers give to animals in Saving Turtles, I see power exertion as an integral part of rehabilitation and even embedded in care and love as a form of tinkering.

Encountering death

Rebecca and I are scheduled to work at the rehab centre in Portsmith this morning. It is a cloudy day in May, at the end of the wet season, yet nice and warm with a slight ocean breeze blowing through the trees. This is my first time "turtling" with Rebecca, a local Cairnsite in her early twenties, and a fairly new member of Saving Turtles who studies marine biology at the local university. Rebecca tells me she heard about Saving Turtles at the university she attends through Sarah who does her Phd there, and decided to join as it is relevant for her degree in marine biology as well as a meaningful thing to do on her spare time.

As we arrive at the rehab centre we start with the volunteer chores. I walk over to the tap which turns on the water for the hoses we use to wash the filter-bags and Rebecca collects the key hidden under the rock behind the fence. We lock up the two doors to the centre as well as the container where all the paraphernalia one needs for a turtling session is located; turtle-food consisting of imported squid from California, feed-sheets that show you much food to give to each turtle, medicine, shovels, gloves.

When this is done, we walk around to check if everything is in order as Matt instructs all the volunteers to do. This involves checking if the water runs as it should, that nothing leaks or overflows, and that all water-pumps are working. After a quick check we agree that the water seems to be running as it should, although something else is wrong. "this turtle seems dead"

Rebecca says laconically, she leans over the side of tank number five, one of the smaller tanks that I remember being empty just a few days ago.

We look down at a very small juvenile green turtle, not much bigger than a dinner plate. We discuss wether we have seen this particular turtle in the centre before. Its head tilts downwards and the right side of its shell is out of water indicating that it floats. "It is not moving at all" Rebecca says, her tone suggesting uncertainty. We conclude that this one must have come in quite recently. "reckon we should move it to see?" I ask. "I think I can smell it" Rebecca says. I try move it gently with a plastic pipe lying on the ground next to the tank. The turtle is unresponsive. "looks dead, yeah" I say. "I know a good way to check if they are dead, you can pull their back flipper cause they have a reflex there" Rebecca says, yet none of us do anything, seemingly unwilling to touch the dead turtle. "its eyes aren't moving at all" she concludes.

Rebecca fetches the feed sheet from the container "yeah, this one just came in, it says new here on the feed sheet". We discuss what we should do. Rebecca suggests I call Sarah which I do and I tell her the turtle in tank five looks dead. "is it dead is it? It's got no eye movement?" she asks. I tell her that as far as we can tell after having stood here for a while, it looks dead. "okay, take it out and put it in a plastic bag, there should be some plastic bags in the container, and then place it in the freezer...it just came in yesterday from Wongai beach...put it in the freezer and I'll come over in the afternoon". Rebecca takes the squid we use for feeding the turtles out of the freezer to make room for the turtle, as well as to defrost it to have it ready for feeding. I tell Rebecca what Sarah said, and that it seemed Jenny was not too surprised or sad about the death of this turtle.

Liz, a veterinary in her forties and a volunteer who is scheduled to join us today arrives in her car. "there's a dead turtle here" I tell her. "oh is it?" she says in a sad tone. "ahh, poor little turtle" she says when she sees it, although none of us seem to actually feel very sad. Instead of lamenting, we quickly start with the task of somehow disposing of the turtle.

We walk into the container to try to figure out what kind of plastic bag to put it in. There is no bag suitable or big enough for the turtle, although we eventually find a bag that might be big enough. Liz locates some gloves in the corner that seem to be intended for gardening with small rubber dots on them for better grip that seem perfect for grabbing dead turtles. We don the gloves and walk back to the tank. I pick the turtle up with my fingers placed on each side of its shell. We conclude again that it is definitely dead when its head hangs down as it I lift into the air.

"this is really light turtle" I tell them. As we inspect it closer we see that the turtle's belly and the part of its shell over the neck has sunken in badly. From what I have picked up through being around other volunteers and Matt and Sarah, I know this indicates that the turtle has starved; its muscles and fat has disappeared in an area that should normally be rounded and protruding. The edge of its shell are also conspicuously flat, which means muscles that in healthy turtles normally support the shell and give it an evenly concave shape is lacking. Around its head, the skin seems to almost hang off the bone and a visible bone is sticking out where the head meets the neck. Liz and Rebecca let out a sad "ahh" as I try to manoeuvre it into the plastic bag that Rebecca and Liz holds between them. Although the turtle is definitely dead, we all seem to try to touch it as gentle as possible, almost like we try to prevent hurting it. I cannot help but feel that we are dealing with sentient being, a being with persona that demands respectful and gentle treatment even after it is dead. The turtle emits a strong smell and we all grimace as I carry it over to the freezer where we carefully lower it down. "I hope it really is dead" Rebecca says, and we smile slightly.

This story is taken from one of many morning-session where the volunteers and I carried out our chores, although in this particular instance a turtle died, something I only experienced on a few occasions during my fieldwork. The story tells of some of the ways the volunteers face death in the turtle hospital. As Saving Turtles runs a hospital for sick turtles, encountering situations where turtles die is not unusual, yet when being there that day and seeing a dead turtle I could not help but feel surprised to a certain extent. Although I knew of many other turtles that had died while in the care of the organisation, animals I had cared for myself and grown affectionate of, this was the first time I, as well as Rebecca and Liz actually took part in the procedure of disposing of an animal that had died whilst in care.

As Sarah came over later that day I learnt that dead turtles are normally handed over to state rangers in Queensland National Parks and Rangers. They collect dead turtles mainly to prevent any trade of turtle meat or shells which is illegal by law in Australia. Compared to other occasions where turtles died and the people present displayed highly emotional reactions, the reactions of Liz, Rebecca and myself that day are somewhat different; we were more disgusted by the overwhelming smell and the macabre appearance of the emaciated dead turtle than sad. Also, compared to other turtles that the volunteers knew intimately after having cared for them through the everyday volunteer chores where volunteers and turtles meet, this one was a stranger to us and finding it dead was perhaps unexpected which might explain our rather mundane reactions upon seeing it floating there that day. The different emotions at play when animals died while in the care of the organisation speaks of some of the ambiguity surrounding death in Saving Turtles.

Bio-Power

Attending to power and death in nature conservation, that ultimately aims to save and conserve *life*, has larger consequences for how we should understand efforts put in place by state or non-state organisations to conserve or rehabilitate parts of the environment. In conservation efforts directed at sea turtles and in efforts to rehabilitate sick turtles as conducted by Saving Turtles, animals are being subjected to power and political control and can thus be said to enter the realm of what Agamben terms *bios*- qualified political life, as opposed to *zoe*- bare life(Kirksey and Helmreich 2010). This is not a political life in which turtles have citizen-status, but where the life and death of turtles becomes a political concern, through the development of new conservation policies, but also through the mundane and more minute workings of power within a turtle rehabilitation centre, where practices have effects in turtle bodies.

Foucault's analytic of bio-power is thus another potent term for describing how "life itself enters history", by subjecting life to political control through new technologies for governing in modernity(Wolfe 2010: 52). A recurring theme throughout much of his archeology of ideas; the analytics of bio-power and bio-politics were developed by Foucault to describe how human bodies are controlled through a politics of disciplinary power. In Discipline and Punish, Foucault argues that the onset of modernity constitutes a shift in the exercise of power where life itself becomes a target of intervention, through the novel use of technologies by states directed at individual human bodies. Compared to earlier forms of power that concerned itself mainly with the right to seize things and persons and the right of deciding life or death of individuals, bio-power is characterised above all by its productivity. It disciplines and orders bodies strategically for a purpose and consequently, life becomes a political object of intervention and change(Rabinow and Rose 2006: 196).

While Foucault developed bio-power as a way to explain how power asserts itself on humans, the term can productively be deployed to describe how power asserts itself on animals in human-animal relations. This points to how conservation can be seen as an ultimate modern form of bio-power, extended to include non-human beings and things. In conservation programs, individual animals are subjected to bio-power through breeding programs or rehabilitation where there often exists an abstract idea of a *species* in mind. This abstracted collective species in conservation reverberates with Foucault's argument about how the idea of a population is actively *made* into a tangible entity through the statistical calculations of the modern liberal state(Foucault 2000). While Foucault claims that governing in the modern liberal state is done on the basis and purpose of a human population, the bio-power exerted on animals through conservation programs likewise seems to be done on the basis of improving,

increasing or preserving a species population. However, when improving or saving a species in its entirety is the goal, then this can sometimes justify the killing of individual animals deemed unfit or bad for the species as a whole(Chrulew 2012: 139). This is the seeming paradox of bio-power. Preserving or improving life viewed as a collective species often involves death and the use of power.

In many ways, this resembles what goes on in Saving Turtles. Although I never heard my informants explicitly state that animals were being killed to improve an idea of a whole species, individual animals in Saving Turtles that will otherwise die are often forced to survive through certain practices, and this is ultimately connected to sea turtles being enacted as a threatened group of animals. For many of the volunteers, the uncomfortable practices a turtle might be subjected to, are often justified on the grounds that saving as many turtles as possible contributes to keeping turtle numbers in the ocean up. That practices in the hospital sometimes involved quite strong use of power was perhaps most clear when sick turtles that refused to eat were subjected to what was referred to as *force-feeding*. This was a practice that aim to keep sick turtles that refused to eat alive by forcing food into their bodies.

Force-feeding

Sarah wants to force feed a turtle that is critically sick. Jenny and Ida, two volunteers in their early twenties are present to help her. It is a small juvenile green turtle. Unlike some of the healthier green turtles currently in the centre, this one is emaciated to the point where its neck-bone is protruding from underneath its skin. Healthy turtles are supposed to have a "neck like a rugby player" as one of the volunteers succinctly put it. This turtle on the other hand is far from looking strong. It offers little resistance when being picked up by Sarah. As she lifts it up, its head hangs down slightly. Besides being emaciated, its shell is fractured right above its head and covered in a palette of red and white colours from remnants of dried anti-bacterial paste that Sarah applies on its wound.

Sarah places the turtle on top of a wooden plate; "the old torture board" she says sardonically. This plate is tilted downwards into a box so that the turtle's head points upwards. This is to make sure the food goes down the right way as the turtles that are force-fed more often than not regurgitate much of the food that is forced down their throat.

While Jenny and Ida hold the turtle still, Sarah opens up a small can of "recovery"; food intended for cats that are recovering from injuries. She tells me she gets this from the veterinary clinic she runs with her husband. As there is no food made specifically for turtles that are being treated in a turtle hospital, cat food will have to do. Normally, turtles treated

by Saving Turtles are fed squid imported from California; a relatively cheap food source that is rich in protein and the quickest way for the turtles to gain weight. The sickest turtles that have stopped eating however, are force-fed with recovery, which is supposedly better for them according to Sarah.

Sarah takes a couple of spoon-fulls of the food into a small plastic box and mixes it with water. This is then sucked into a large syringe. While Jenny and Ida hold the turtle still, she forces the mouth of the turtle open and quickly inserts the tip of syringe into its mouth which it bites down on. The food is then injected into its mouth. To make sure the food gets down into the turtle's stomach, Sarah instructs one Ida to stroke its neck. She tells us this triggers a swallow reflex in the turtle which forces the food down its throat. This is repeated several times; food is injected and Ida's finger runs up and down its throat. However, much of the food goes out rather than in, and even squirts out of its nose as the turtle breathes out. It is a messy scene. Both Ida and Sarah eventually have their hands covered with a red-brownish mixture. Sarah tells us that the turtle is not hurt by this treatment and that doing this is necessary to make the turtle live. Ida and Jenny do not seem reassured, and seem to feel rather uncomfortable about the whole incident.

This is an example of how caring with the aim of making turtles survive sometimes involves the handling of turtles in ways that make both humans and turtles feel uncomfortable. From taking part in a force feeding, it becomes evident that treatment can sometimes involve a kind of violence almost, although I must thread carefully when using that term; violence, as it carries with it negative connotations. Sometimes the turtles that underwent force-feeding as described above, would get better and start feeding on their own, a sure sign of improvement and subsequently be released into the sea. Others, on the other hand, would end up dying. The fact that some of turtles that were force-fed ended up dying was a source of contention among the volunteers and the leaders of the organisation. While Sarah was determined to try to save every turtle that was taken in no matter how injured or sick it was, Matt, the other leader, was more open to assess the individual turtle's chance of surviving and perhaps euthanise some of the sickest individuals to prevent them from unnecessary suffering. Some of the volunteers like Jenny, who took part in the force-feeding, confessed to me quietly that she thought force-feeding was too brutal and suggested tentatively that perhaps some of these turtles should be allowed to die.

Among the volunteers and the leaders instances like this, where caring also involves hurting, as *hurting-while-caring*, prompted fundamental questions like; when should an animal be allowed to die? When can care sometimes be a form of violence? Where is the line between caring and hurting? There were no overall rules in place that separated between morally good

or bad ways of keeping a turtle alive, or standards that decided when a turtle should be euthanised or not. This was constantly being mended out in arguments between Matt and Sarah, in joint assessments or in day to day decision-making.

Fragmenting power

When thinking about force-feedings or keeping turtles in confined tank spaces, understanding these practices through the analytic of bio-power is fruitful in the way it sheds light on how power, and even violence, are not just a negative forces, but something that can have productive effects. As Sarah would often tell me when we force-fed other turtles, "force-feeding works". According to Sarah, it had proven to be a good technique for ensuring that turtles that were on on the brink of dying and could not feed on their own, actually improved and survived. Brutal practices sometimes ensure that turtle-lives go on.

As perhaps the most visible form of power exertion from the hands of humans on animals in Saving Turtles, force-feeding is a form of power where humans actively intervene and sometimes save the lives of individual turtles. So in this instance, we see how humans handle turtles physically and subject them to a practice hey seem to find highly uncomfortable. So here, it human volunteers seem to be controlling and ordering turtle bodies according to an envisioned goal. In many ways this fits into a grand narrative of humans as subduing nature, where humans in a modern age extend their control to reach animals and other non-humans.

However, this narrative has its limits. The term bio-power can also be used to open up a different take on power, one that is more attentive to the less overt workings power and its unintentional effects, which does not follow the image of rational humans acting upon animals to produce intended results. To account for how the workings of power in Saving Turtles, this is only a part of the story. If *life* itself is a product of bio-power, then this can be used to upend any simple geometry of power where one envisions an individual acting and someone else being acted upon. Foucault writes about how power does not just inhere in individual humans, but that it can also be embedded in the architectural make-up of buildings. With the famous example of the *panopticon*, Foucault shows how the structure of a building can make people discipline themselves. In a panopticon, an observational tower that makes inmates think they are being seen conditions them into refraining from unwanted behaviour, meaning guards become superfluous to a certain extent as the architectural structure of the building itself ensures people discipline themselves. Power thus become automised and dis-individualised(Foucault 1995: 4).

This is a kind of power where it is difficult to discern clearly where power comes from, where

it is does not inhere in particular individuals, but is more fragmented and dispersed throughout a system. In Saving Turtles, the hospital requires things to be done in certain ways for it to function; filter bags have to be cleaned properly or else the water quality deteriorates, algae has to be washed off the shells of turtles or else they get weighed down with mud, and turtle droppings and food remnants have to be siphoned out of the turtle-tanks to prevent the turtles from swimming around in their own waste. The people who we can talk of exerting power as they force-feed or euthanise turtles, are here already effected by the system in which they take part, and they might not be aware of the effects these less overt workings of power have in them. And a lot of these practices requires skilled technique which must be learned and adopted. So people are also being shaped here through the system embedded in the hospital which makes people behave in certain ways, albeit in a less intentional manner.

So when one speaks about the workings of power in Saving Turtles' rehab-centres, it is obvious that this works in many directions and is highly multi-faceted and often unintentional. While it might be obvious that humans have power over turtles when focusing on a practice like force-feeding, turtles also have power over humans making them improvise certain practices on the spot as they get sick, or adopting certain techniques for feeding or cleaning. These might not be intentional acts from the side of turtles, but is something that has effects in human bodies and minds.

When I write about power, this insight can provide a ground for seeing how humans are not necessarily hierarchically placed over turtles in terms of power. There is no ultimate power residing in human actions where turtle bodies are shaped and ordered perfectly according to an envisioned standard. Rather, there are constant deviances, frictions as well as unplanned effects that lead to improvisation and alternative ways to move forward where humans are effected as well. This resonates with what has been written about domestication from a STS perspective. In relation to the farming of salmon, John Law argues that domestication, while ordering salmons in a certain way, also involves *excesses*, in the form of unintentional and unplanned effects, like salmon-louse or microbial parasites that grow out of this work(Law 2012 :10).

While the analytic of bio-power is good to think with in relation to Saving Turtles, as a way to situate their work within a broader world of conservation practices or to see how power might be productive, it is nevertheless a generalisations that is meant to say something fundamental, and big about modernity and power. To explain the workings of power that go on in the hospitals, perhaps a more down to earth approach is needed, one that takes account of the specificities of working with sea turtles in a specific time and location and the unintentional effects of power. The people who care for sea turtles are well-meaning people who express

love for the animals they care for. They give the animals names and talk to them, choose their favourites and even play with them. When talking about power, I argue that this must also be accounted for. So while keeping the effects of bio-power in mind, I want to attend to the nuances and facets of how this power might work in practice, in a specific site; how volunteers might sometimes be uncomfortable about some of the practices that involve overt power exertion, or how turtles act back on humans which has effect in human bodies. The story of Angie is

Angie

Angie is a big female Olive Ridley sea turtle, a Lepidochelys olivacea, and the only of her kind in Saving Turtles. Although placed in of Saving Turtles' hospitals, it is not like Angie seems particularly ill. Even for an untrained eye she comes across as a conspicuously fat turtle and the "feed-sheet" indicates that she gets more squid every day than any other turtle in the centre. However, despite a healthy appetite, Sarah tells me she has not been released as she is suffering from floaters disease and emphysema; which I am surprised to learn is a lung condition that can effect turtles. So, although Angie has improved vastly from the time she was taken in from the ocean, her improvement only seems to go up to a certain point.

This has caused Angie to be confined to a tank for as long as three years. Taking care of Angie involves constant pondering over how to make things better for her. While she was first placed in a small tank, Matt built a bigger one more comfortable for an adult turtle. As it is thought that Angie will have to stay in the rehab centre for the rest of her life, Matt constantly tries to think of ways to make her life better and tells me that he thinks about building an even bigger tank in the back of the rehab centre where Angie can "retire", or where it is hoped she might get better so she can be released. However, making Angie's life comfortable in a confined tank-setting is hard. Indicating from the way she is behaving, she seems frustrated and bored in the rather feature-less environment she is confined to. While some of the other tanks have pieces of coral in them for the turtles to scratch themselves up against or play with, Angie's tank is without any objects in it as she has a habit of biting stuff in her tank apart which could potentially kill her as she swallows it. This has led the other volunteers to developed their own personal caring-techniques when it comes to Angie. Cleaning her tank with a siphon, Barb usually plays with Angie by letting her chase the siphon around in the tank. "It keeps her occupied and lets her think about something else" she tells me. Vic usually scratches a particular spot on Angie's shell which makes her lift her flippers up in the air, obviously content, at least for a short moment.

Tinkering

The way Angie is being cared for where volunteers try to find ways of performing good care while also knowing that this can be a form of violence, where a turtle can sometimes be confined to a tank for years on end, brings me over to the concept of *tinkering* which can usefully be applied to the work of caring for turtles. Developed by Mol, Pols and Moser (2010), thinking of care as tinkering, can open up our understanding of care as something more than involving just warm and close relations, but as something deeply embedded in technologies and even systems of power, which are not oppositional to care, but sometimes integral to it. The concept of tinkering is also in tune with how the leaders in Saving Turtles think when treating turtles, where plans might suddenly change and where new methods and practices are tried out as one goes along. Tinkering, mending, improvising are good metaphors for describing the work involved here, where new practices are tried out and old ones are improved. In relation to the story about Angie, confining her to a small tank for years on end can be understood as a form of bio-power where this is justified on the grounds of saving an abstracted species as a whole. However, while this might be an overarching goal within Saving Turtles, Matt's and the other volunteers' will to continuously try to make life better for Angie shows how this kind of power exertion also involves a form of care.

The case of Angie makes it evident that not only are lives of turtles being controlled, but the ways turtles behave also affect humans emotionally, where they are lead to develop new caring-techniques or build new tanks. Reading tinkering through bio-power makes it apparent that while rehabilitating turtles involves a multifaceted and multi-directional form of power that orders both human and sea turtle bodies.

Chapter 6: Releasing Matilda

While the previous chapters centred on what goes on within the confines of two rehabilitation centre, this chapter focuses on the final stage of a successful rehabilitation process, when a turtle is released back into the ocean after months of treatment. A release represents the goal of rehabilitating animals in Saving Turtles. It comes to stand as what the volunteer-work is ultimately aimed towards. If the process of rehabilitating a turtle goes according to plan, the turtle is in the end released back into the ocean, the place where it was taken from initially. However, from what will be made clear in this chapter, a release is about much more than simply releasing a turtle into the ocean. It involves an intricate choreography involving people, animals, things and places which effects a particular ontology; that of wilderness-nature.

Preparation

As I find myself waiting at the marina in Cairns to go out to a small coral atoll on the Great Barrier Reef along with Sarah, the leader in Saving Turtles, plus Jen, Liz and Neill, three middle aged "turtle-volunteers" and a *hawksbill* in a white box, we attract quite a bit of attention from tourists walking by. Or rather, one of us seems to be of more interest than the rest of us. It is not everyday you see a juvenile hawksbill sea turtle, let alone one with a GPS "tracker" attached to its back, lying in a white box on the ground. This is Matilda; a turtle that has been in the care of the organisation for over six months. Today is a special occasion as Saving Turtles is conducting a turtle-*release*. Sarah tells me that Matilda will be *released* "back into the wild"; into the sea where she once lived before she was emitted to one of the turtle hospitals that Saving Turtle runs. Right now; she is bashing around in a white plastic box that is barely big enough for her while Jen and Sarah try to calm her down by holding her still. Although this is a juvenile hawksbill and therefore not a full-grown individual, her oval shell is still about the size of a small coffee table and she is surprisingly strong; Sarah and Jen have their hands full trying to make her lie still.

Hawksbill sea-turtles are named after their distinct hawk-like beak, and have patterns of black spots on their back which make them easy to distinguish form other turtle species. Along the edge of their shell; jagged edges point downwards giving them an unmistakable look. This is not entirely discernible now however, as Matilda is covered in wet towels to protect her from the scorching heat in the tropical sun. Taking a sea turtle out of water might potentially kill it as it can easily dry out, so keeping a sea turtle wet is crucial. A wet towel is also placed over Matilda's head. Sarah explains to me that this calms her down by covering her eyes as well as it weighs her down a bit restricting her movements. For someone new to a turtle release as I

am however; the first impression is that is looks rather brutal; from time to time Matilda tries to jostle the towel off her head by throwing her head backwards in fits and I worry that she might have trouble breathing with a wet towel over her nostrils.

We are currently waiting for the departure of Great Adventures; one of many boats that take tourists out to the Great Barrier Reef in this area, and this one is headed for Green Island; a coral atoll and a popular tourist destination complete with a hotel-resort where the release will be undertaken. Seldom does a turtle release go unnoticed by media. Today we are joined by a television crew of two men and two women from *local news seven*; a local branch of ABC news, a major Australian news network, a man from C*airnspost*; a local news paper, and a man from *WIN-news*. They are all here to attend the release of Matilda and have brought with them a formidable array of cameras, tripods, light and sound equipment for filming both above and under water. This is heavy equipment which is now loaded onto the boat. They all seem intent to capture it all down to the last detail. The spectacle of a turtle release makes good tv. “The media drives this forward” Sarah tells me, meaning that the media attention given to Saving Turtles can be converted into money donations from the public which Saving Turtles desperately needs for food and materials to care for the sick turtles in its turtle hospitals.

Floating Matilda

Although a release is considered an unusual event, something Saving Turtles organises only a few times a year on average, for Matilda the hawksbill, this is not new. As Sarah explains to me while we board the boat for departure; Matilda has in fact been released by the organisation on an earlier occasion making this her second release should it all work out. She was originally found suffering from *floaters disease* out at sea by national park rangers and taken in to one of Saving Turtles' rehabilitation centres. When first taken in, she was extremely thin and spent nineteen months being treated by volunteers before being released on Green Island, now with a GPS “tracker” on her back. Sarah tells me that this is part of her ongoing doctoral research program where she focuses on the success-rate of turtles that go through rehabilitation and their movement in the ocean once they are released.

Later, a couple of weeks after the release, I learn that attaching trackers to the turtles that get released has been a source of controversy among people in Saving Turtles. Attaching the tracker on Matilda's shell required a five hour long operation, where the device was painstakingly fastened with fibreglass while she was out of water, which is highly uncomfortable for an animal whose preferred habitat undoubtedly is water. Matt, the other leader in the organisation is opposed to attaching trackers on juvenile turtles like Matilda, as

he argues this weighs them down which might impede their ability to move properly in the water as their bodies are still too small for such a device. Matt's concern reminds me that a tracker is not just a neutral object by which humans might get a glimpse of the movements of a sea turtle, but something which the turtle has to live with and something which becomes part of the turtle itself. Matilda's movements and her *being-in-the-world* is fundamentally shaped by a technological object that sits on top her shell.

It is difficult to know precisely whether or not a prematurely attached tracker is what ultimately led Saving Turtles to take Matilda in for yet another round of treatment. Unfortunately, she was once again found floating out at sea by national park rangers, suspected of suffering from floaters disease. As every turtle that gets released by Saving Turtles is tagged with a small piece of metal carrying a registration number on its flipper, Mathilda was recognised as an former "patient". This time around however, her time in treatment was significantly shorter; Sarah tells me she reckons there was nothing wrong with Matilda and that people sometimes mistake normal sea turtle behaviour like playing or resting on the water-surface for sings of floaters disease.

So from what Sarah tells me while the boat takes us over to Green Island, it becomes clear that Matilda is not just any hawksbill sea turtle, but a turtle with a long history of intimate contact with people that many people have a stake in, as she symbolises hours of volunteer-work that has gone into treating and preparing her for survival in the sea, in the *wild*, and in the way she has an expensive flash "science" device attached to her shell. Furthermore, the fact that Matilda was taken in for a second round of treatment, although Sarah suggests this might have been unnecessary, this makes her second release all the more prestigious for Saving Turtles. This time, it is hoped that Matilda will finally be able to thrive in the sea without being taken in for signs of disease.

Muddled boundaries- how to make sense of them?

The fact that Matilda has been released before and is now to be released for a second time makes me contemplate about what is actually entailed semantically in the concept of *releasing* an animal. When Sarah tells me that Matilda will be "*released*- back into the wild" it begs the question of what she is being released from. Applying the term *release* on a turtle conjures up images of an animal in captivity, in a place where it is not seen to belong and should only be placed temporarily. The concept of a release tells us that Matilda's real home lies elsewhere, in the ocean or the *wild,* as Sarah says. The release thus seems to be squarely placed within a dichotomous understanding of nature and culture as opposed spheres. When being treated by Saving Turtles, Matilda was placed a human-built space with pipes, crates,

tanks and systems for water-rinsing and feeding, and she is now to be placed into a natural space where she is seen to belong- “back into the wild”. As I discussed in the second chapter, when released in the ocean, turtles are here once again being enacted as a timeless and unified group of animals where distinguishing traits between individual turtles or between species are downplayed. For the people in Saving Turtles, this is seen as the ultimate goal of rehabilitating the animals in their care.

However, as well as returning into a sphere she is seen to belong, Matilda can here also be said to be *made* wild. Matilda's “wildness” does not inhere in her, but must be actively put into effect, through a successful rehabilitation process and a subsequent release. So if a sick a sick turtle can only be made wild and survive *naturally* through the help of cultural humans, then this complicates the clear-cut boundary between nature and culture insinuated by the concept of a release. The fact that Matilda has a high-tech GPS tracker attached to her body, and that she by now has twice been through *rehabilitation* to rid her of floaters disease and fattening her up for survival on her own, in the *wild*, makes it evident that there is a coordinated traffic going on between these ostensibly distinct spheres and that one can hardly talk about Matilda as a being that is purely natural. Just as much an effect of tender care and treatment from human volunteers and with a technological device deeply affecting her movement, Matilda is more reminiscent of a cyborg the way Haraway(1991) speaks of it; as a being that transgresses any clear-cut boundary between nature and culture and derails any essentialist tale of what constitutes a hawksbill sea turtle. The biological narrative about hawksbill sea turtles as animals with certain attributes and a particular biology as a universalising one-size-fits-all narrative, clearly does not compute with the hawksbill turtle that is Matilda, a critter that must be seen in light of a particular history and a specific time and place.

As anyone can tell, the boundary between nature and culture is permeable and stuff leaks across it all the time. The animals treated by Saving Turtles are often found with human-made objects inside them like sea hooks, fishing-line or plastic, objects that tend to slowly kill them by causing blockage and floaters disease. So the place where the sea turtles treated by Saving Turtles are released, the tropical waters in Far Northern Queensland, is not entirely *natural* either. It is fundamentally effected by human culture. As I discussed in the second chapter, for much of the environmental movement this human impact on nature is enacted as a disrupted balance that needs to be repaired.

So, although the concept of *releasing* an animal into nature the wild is deeply informed by an understanding of nature and culture as two separate spaces, in practice, there are no definitive boundaries between them. There is no pure nature and culture standing beside each other, but

rather a proliferation of naturecultures. The place where Matilda is to be released, Green Island is a fitting example of a naturalcultural place. While being part of what is defined as a "marine national park zone" by the Great Barrier Reef Marine Park Authority(GBRMPA), which seems like a proper *natural* setting for conducting a release, the island is also home to a luxury tourist resort complete with a helicopter pad, a freshwater pool and a crocodile park currently housing the biggest crocodile in the world. So if this is a natural place, then it is also a profoundly human-cultural-economical place where people work and where money is being made from marketing the reef as a consumable *experience* for tourists. So on the face of it, Green Island is a hybrid place that is neither completely natural or cultural. I here turn to the release of Matilda on Green Island as practice in this naturalcultural place.

Release

As the boat reaches our destination, we disembark onto a long pier that stretches over shallow reefs teeming with both fish and tourists of various kinds and onto the sandy grounds of Green Island. A small group of employees from the Green Island Resort stand ready to help us unload the gear. Sarah instructs me to carry the box containing Matilda together with Aikihiro, a twenty-three year old japanese working on the island who also volunteers with Saving Turtles on his days off. Slowly, as the gear is unloaded and stacked along the pier, we start making our way in towards the palm trees some hundred metres away. As we start walking, most of us carrying heavy equipment, we resemble a religious procession as we move slowly in line with Aikihiro and I carrying Mathilda in front.

When we reach the entrance to the resort under some palm trees, we stop and wait for further instructions. More people have joined us now; more of the hotel staff are here to help plus the manager of the island's tourist resort; Sue, and a representative from the Quick Silver Group; a firm that owns many of the boats that take tourists out to the reef in this area and one of many local firms who donate money to Saving Turtles. As everyone catches up and gathers under the trees, the people in the television-crew starts testing cameras for light-conditions and checking batteries for power.

After some time where Sarah discusses how the release will be conducted with Sue, we start moving again, now with two cameras mounted on tripods documenting Aikihiro and me carrying Matilda. We are headed over to the other end of the island where a beach facing the ocean has been chosen as the site of the release. Every now and then we make stops to allow the film-crew to walk in front of us to film as we move forward making every two steps forwards feel like its followed by one back. Drenched in sweat from the relentless tropical sun, Aikihiro and I soon tire from lifting and putting down the rather heavy box with Matilda

repeatedly.

As we reach the end of the road where the path turns into sand we stop in the shade under some trees. More camera gear and light equipment is unpacked and prepared; big tripods erected and microphones tested. Matilda lies in her white box with wet towels covering her. Occasionally she lifts her body up with her flippers to try to get out of the box, but is then firmly pushed down by Aikihiro. "To prevent her from exhausting herself" he tells me. The sun is scorching and Aikihiro and Karen worry if Mathilda might be feeling uncomfortable in the sun. While everyone seems excited about the release, by now, Aikihiro and Karen seem slightly annoyed that it is taking so long. While we wait to walk onto the beach, more shots are taken of Matilda from several directions. Sarah and Sue are instructed to carry Matilda out on the beach and back again, while one of the camera-men lies down on the ground to film the scene from underneath as the box is carried over the camera. This is repeated once more while the cameras are moved around to capture the scene from different angles. Next, the box containing Matilda is put down again and lenses are changed.

Sarah seems used to the slow progression that comes with being accompanied by a television-crew intent on getting perfect shots. After fifteen minutes of preparing cameras and lenses, everything seems set for the final release and we all walk out onto the beach. The release is carefully orchestrated by the television crew. Jenny and the Sue will be the ones actually putting Matilda into the water, while the volunteers and staff members are instructed to stand behind them in a half-circle as the filming will be done from the water.

First, a short interview is conducted with Jenny. She is asked to tell "Matilda's story" and explains the intricacies of rehabilitating a turtle and the importance of saving hawksbill turtles who are considered endangered. She also notes the fact that this will be Matilda's second release and adds "she needed a bit more rehabilitation". It is now finally time for Matilda's release and she gets lifted out of her box by Jenny and Sue who carries her between them out into the water. While two men carrying cameras walk in front of them, one with an underwater-camera to capture the scene from below the water surface, Matilda impatiently flaps her wings while she is held just above the water. Final shots are taken and after what seems like an eternity, Matilda is lowered into the water. The crowd erupts into applause and cheers as she speedily heads out to sea and the reef that surrounds the island. By all accounts this is a successful release.

Dissolving and delineating nature/culture

What becomes clear after taking part in the release that day is that releasing a turtle is about

much more than just releasing a turtle. Although the concept of a turtle-release might at first seem like a self-explanatory affair, the empirical excerpt shows how it is a highly complicated task. As is evident in the painful orchestration of humans and non-humans, it entails a highly choreographed event with actors of various species and kinds where what is at stake are ontological boundaries between nature and culture.

However, while the heavy human involvement in making Matilda *wild* can be seen as a prime example of a naturalcultural-doing, which makes it futile to separate neatly between these two spheres, for the people involved, this boundary is still very much real and meaningful. An analysis of what goes on during the release that day must take this into account. While the notion of the cyborg or natureculture brings attention to the inherently muddled character of these ontological spheres, this does not mean that the boundary breaks down to the point where we should abandon it completely. Although muddled through people's doings and sayings that inevitably draw on stuff from both perceived spheres of nature and culture, the divide is still real, not just as a symbol, but as something material, as something material-semiotic.

To take account of this it is helpful to focus on the performativity of the release and ask what is being *done* through the release of Matilda? What are the *effects* of releasing a turtle on Green Island? Instead of trying to explode the concept of nature and give proof of how it is unavoidably a hybrid construct, or try to deconstruct or criticise the validity of any underlying dichotomies involved in this doing, asking these questions implies I attend to the release as something in itself. It should not be seen as signifying something else, something lying elsewhere than what goes on there at Green Island that day, but the material and semiotic specificities that present themselves during the release should be explored on their own terms(Henare et al. 2007:2).

I here argue that what is being done when Matilda is released, is an enactment of a particular kind of nature I call *wilderness-nature,* which hinges on the nature/culture divide in a specific way. Lowering Matilda into the water, where she is visibly going from one state to another, from being held in human hands and controlled, to be *free* in the wild performs wilderness-nature and its connected nature/culture boundary. It is here made physically tangible through a set of relations involving the volunteers in Saving Turtles, Matilda the hawksbill, tourists who stand by watching, a television crew as well as technical objects and materials of many kinds. In addition, releasing Matilda “back into the wild” is also a way through which *wilderness* and the nature/culture boundary becomes visible, and meaningful for the people in Saving Turtles. For the volunteers, a successful release testifies the fruitfulness of their work and makes it all the more worthwhile to do what they do. For them, it shows how the often boring

and tediously repeated tasks involved in rehabilitating sick turtles sometimes makes a real difference. A release is therefore considered a day of joy and celebration as well as a chance to look back on the history of the animal in question.

So when I say that the release of Matilda makes this boundary tangible and meaningful, while as a naturalcultural animal she also complicates this boundary, this can be understood through the notion of a boundary-object as explained by Leigh Star and Griesemer(1989). They explore how zoology museums have historically developed strategies for obtaining objects that get passed between widely different social worlds. Involving a heterogenous set of actors and practices where these objects are understood and used in different ways, this work has been successful by way of not reducing these differences, but by letting these objects work as loci of tension that enables temporary bridges across which different social worlds can cooperate. A boundary object is thus "...plastic enough to adapt to local needs...yet robust enough to maintain a common identity across sites"(Leigh Star and Griesemer 1989:393). Matilda is an animal which mediates the divide between nature and culture by transgressing it, as a boundary-object, or rather as a boundary-animal, which comes to represent a common boundary between ontologically distinct spheres when she is released. The boundary crossing can thus somewhat paradoxically be understood as a simultaneous *dissolution* and *delineation* of a nature/culture boundary. It represents a kind of ordered traffic that makes this boundary materially tangible and meaningful for people.

Taking wilderness-nature seriously

When I say that wilderness-nature is enacted, as something materially real and something in itself, I here position myself against seeing wilderness as simply a symbol with no basis in physical reality. By focusing on the release as a practice that enacts widerness-nature into being, then this can be used to approach wilderness as more than a symbol or a projection of human attitudes and desires onto a seemingly passive nature. Seen instead as a material-semiotic phenomenon, where sea turtles, cameras and corals together with humans are part of enacting wilderness, and where wilderness comes to matter politically for this very reason, then the release of Matilda should be seen as a form of *ontopolitical* work. It effects a particular ontology through the relation-forming practice of releasing a turtle.

Exploring wilderness through a heuristic of practice and performativity, puts me slightly at odds with many authors who emphasise the social and historical contingency behind the concept of wilderness or nature. As argued by William Cronon in "The Trouble with Wilderness; or Getting Back to the Wrong Nature"(1996), wilderness is a deeply troubled concept that leads one to imagine a nature devoid of human influence. Cronon argues that this

perception of nature developed in the U.S in the eighteenth century out of religious imagery, where wilderness came to stand for certain designated sublime and untouched places on earth where God's presence was more easily felt. The view of nature as wilderness, where it was perceived as existing outside any form of human-cultural interference, was again only possible through the killing and forced removal of aboriginal peoples from these seemingly untouched and wild places(Cronon 1996: 79). For Cronon then, wilderness ultimately involves "getting back to the wrong nature", a nature where humans are thought to have no place.

These historical contingencies behind the concept of wilderness are undeniably important to have in mind when looking at his phenomenon, but in line with what I argued in the introduction, solely attending to these aspects can also lead us to think that this is all there is to wilderness; that it is nothing more than a problematic and seemingly false projection of western imagination steeped in colonial history onto a given physical nature. The consequence of this can be that some feel the need to write wilderness in quotation marks, as "wilderness", to distance themselves from this purportedly false view of nature. Although understandable given the rampant debunking of this term, this brings an uneasy sense of closure to an analysis of wilderness. It seems as though it is interesting as nothing more than a false symbol, end of story. However, if seen through the heuristic of *enactment*, I can stop writing wilderness in quotation marks and instead take it seriously as a material phenomenon that is brought into being relationally and processually in a complex assemblage of language, politics, cameras, corals, turtles and people of which the release of Matilda is an example.

Wilderness is thus not just a social construct, but matters politically and has real material effects in the world as an enactment. This insight can also be used to take seriously the way my informants in Saving Turtles deployed the term in daily conversation(Hobbs 2010: 119). For them, wilderness really meant something and referred to something utterly real that was worth protecting. Many of my informants were australians who told me they had moved to Cairns and Far Northern Queensland partly because of what they saw as the wild *untamed* nature of this place. When commuting by boat over to Saving Turtles' rehab centre on Fitzroy Island, one passes a dramatic and scenic coastline with sandy beaches interspersed among rugged cliffs and patches rainforests. Among the volunteers, words like *wild*, or *pristine* tended to be used when describing these places. While commuting, the volunteers would spend a good deal of time talking about extraordinary personal experiences in nature, like spotting hump-back whales while out at sea, or coming upon a sting-ray while snorkelling. For the volunteers, these instances were evidence of wilderness, something that was undeniably real. When I pressed these volunteers on their conceptualisation of wilderness-

nature by noting that much of the australian nature is in fact shaped by practices such as intentional bush-burning(Franklin 2006b), or effected by economic practices such as eco-tourism, this did not seem to collide with their idea of nature as untouched wilderness.

As it emerged through talk with informants, wilderness thus seemed ambiguously conceived of as both untamed, outside of human influence, yet at the same time as a place readily accessible through hiking or snorkelling and something people developed a love for through these activities. This seeming impasse, where wilderness is seen as both devoid of humans, as well as something one develops a connection to through certain activities can provide for a productive point of entry for exploring wilderness as more than symbol. Instead of deciding whether this view of wilderness holds together or not, I find it more useful to stay with this ambiguity and attend to how the image of wilderness is drawn on by people in ways that might collide and be a source of productive friction.

Writing about the concept of the frontier in Australia, Deborah Bird Rose and Richard Davis usefully argue how concepts associated with colonial history that connote oppression and violence are always multi-faceted, and that we must tread carefully when deciding what concepts entangled in colonial history should mean(Davis and Rose 2005: iii). Writing about the concept of the *frontier* in Australia, they argue for *dislocating* the frontier and open it up to the complex history of entwined aboriginal and settler histories to acknowledge both violence and dispossession as well as contingencies and cooperation that has taken place throughout Australia's colonial history. Instead of seeing the frontier as specific period of time in a Australia's history that is eventually overcome, they opt for an understanding of the the frontier as ongoing site of cultural action(Davis and Rose 2005: iv). I find this useful to have in mind when attending to wilderness as enactment. I am not denying the process of *naturalisation* by which the human made qualities and features of a landscape might be downplayed or silenced, but in the release of Matilda, wilderness could perhaps more productively be understood as a process of ongoing cultural action involving a kind of boundary-work between humans and non-humans.

A precarious choreography

Thus far I have argued that wilderness is something to be reckoned with as more than a symbol or image, but as an enactment. To successfully enact wilderness-nature into being, it requires the successful ordering of different human and non-human actors in a specific way. This can usefully be seen in light of Charis Thompon's term *ontological choreography* in that it orders turtles, humans, cameras and light equipment in a way that resembles a choreographed dance, and where the constitutive actors involved here come to shape each-

other ontologically(Thompson 2005). Understanding this as an ontological choreography is also a good way to underline how the release-builds on a certain cultural script as well as it provides a sense of direction. The release of Matilda was not the first release aired on TV in Queensland. As it was shown on TV later in the evening that day it closely resembled other news-stories of environmental organisations that rehabilitate animals for release "back into the wild" in Australia in general. These are news-stories tell of passionate and altruistic individuals who devote their time to *saving* animals. Volunteers are here presented as individuals who make a difference and offer a positive and hopeful outlook in an otherwise dismal portrayal of environmental problems in the media. A release is first and foremost a sunshine story. More often than not, it involves animals that are seen as charismatic; koalas, kangaroos or turtles, and tells of individual animals with names, like Matilda the hawksbill and the human individuals who help them like the Sarah the leader of Saving Turtles. This narrative informs how the release is choreographed and thus becomes more than just a story, but part of bringing a form of reality into being.

However, when thinking about this as a choreography, which might lead one to think of a theatre-performance strictly following a script, it is important to stress how it should not be interpreted as an example of how the television-crew or people in Saving Turtles shape their surrounding world according to this cultural narrative(Franklin 2011:20). This anthropocentric-cultural focus posits clearly delineated causes and effects where humans are seen as the ones with agency to set things in motion, to shape the world around them. Although informed by a specific cultural narrative, the non-human technological objects and animals in the release have to play their part as well to make it a successful release. Although Matilda proved quite helpful during the release providing the cameras with perfect shots of an animal seemingly happy to be released out into the ocean, other releases undertaken by Saving Turtles show how turtles cannot always be trusted to play their parts. At another release undertaken by Saving Turtles with media present, a turtle failed to swim out in the ocean and swam back onto the beach where it was taken in for more treatment. This points to how a release, seen as an ontological choreography is fundamentally fragile and precarious. It can break down or turn out in surprising ways. So the cultural-narrative that informs how the release is choreographed, should be seen as something that is available to people, but which relies on a heterogenous set of materials, devices and other critters to work out. And importantly, it is always a possibility that humans might fail to play their part in this choreography as well.

This insight has wider relevance for how we should understand the enactment of wilderness-nature and brings me over to the next chapter. While I have thus far argued that wilderness-

nature is something to be reckoned with as more than a symbol or image, but as a real material-semiotic phenomenon that is enacted into being, noting the precariousness of this choreographed enactment shows how wilderness-nature as it emerges on Green Island that day, is just one among many *possible* natures that can be enacted. If it emerges through an enactment, then it follows that it could have been enacted otherwise. The world that comes out of a release might been done differently and given it is entirely contingent on the successful ordering of an array of actors in a specific way, it can easily be disrupter or challenged. This contention brings me over to the end of this thesis.

Coda

This thesis has now gone through the different stages in the work of rehabilitating a turtle. My discussions have centred on a number of different practices involved in rehabilitating turtles within the organisation Saving Turtles. By focusing on ethnographic moments characterised by controversy, friction, resistance, non-coherence, or power exertion, I have tried to elucidate the most pertinent qualities of these practices. I started out asking; what makes it possible to rehabilitate turtles and how does it relate to aboriginal sea turtle hunting? how do practices in Saving Turtles come to shape humans and sea turtles on an ontological level? how does this involve uncertainty, non-coherence and power-exertion? and how does the work of rehabilitating sea turtles enact wilderness as a particular form of nature?

In relation to a turtle washing session, I argued that humans and sea turtles come to shape each-others ontologies intra-actively when turtles are washed, and that the iteration and openness of this practice can be seen as a form of poetic figuration that is nested within broader naturalcultural cycles. In the next chapter I focused on Charlie; a green sea-turtle that suffered from floaters disease and showed how moments of indeterminacy with differing interpretations of a turtle's condition are integral to treating turtles. Moreover, by showing how Charlie is scanned in a human hospital where two ontologies emerge simultaneously, I argued for seeing this as a form of *non-coherence*, but where these are made to work together despite their incompatibilities. Next, I discussed how one should understand the power exertion that volunteers carry out on turtles, and argued for seeing this as not opposed to care and love, but entangled in it as a form of tinkering.

While my discussions have for the most part centred on Saving Turtle's rehab centres, I have also touched on practices and discussions that lie beyond the confines these hospitals. In the second chapter I looked at a controversy surrounding turtle hunting and argued that the use of a powerful textual and visual rhetoric within the environmental movement enacts sea turtles as a threatened group of animals and an ontology which sees nature and culture as separate. I showed how this ontology comes with imbedded normativities that renders aboriginal hunting of sea turtles illegitimate, and argued that a video of slaughtered sea turtles is vital in making a policy change. The enactment of sea turtles as threatened, connects to the practices in Saving Turtles by creating conditions which allow for turtles to be transported from the sea and into a turtle rehab centre. In the last chapter, my analysis once again moved outside the hospital walls to explore the enactment of wilderness-nature on Green Island, which I argued should be taken seriously as an enactment. As the final stage in the rehabilitation process, the ultimate *telos* of treating turtles, the release of Matilda provides for a good ending to the story

of how turtles are being cared for and treated in Saving Turtles.

What has happened along the way? With the help of the theoretical and methodological tools developed by a variety of authors within the ontological turn, I have shown empirically how sea turtles are multiply enacted. Their ontologies emerge through particular relational assemblages that are formed through certain practices and must be understood as part and parcel of these. Sea turtles are enacted into being, they are done. They do not come with predisposed boundaries or innate properties, but different turtles are made to matter through different practices. However, as I emphasised in the case of Charlie, these multiple enactments hang together, if only partially.

So in this way, my empirical stories have hopefully contributed, as a kind of onto-political interference, to showing a way out of an idea of the world as one and of ontologies as being fixed and given. The realities and the sea turtles that I have made evident here, are much more messy, non-coherent and multiple that the idea of a *one-world-world* suggests.

Before I end however, I want to briefly go back to some of the methodological contentions laid out in the introductory chapter. Here, I claimed that I am also part of strengthening specific ontologies through the practice of writing and through my explicit focus on practices. If I apply this insight on my analysis of wilderness-nature, then it follows that I am also part of making this ontology real, not just by being there when Matilda is released and taking part in this enactment myself, but by writing about this enactment in hindsight. However, here it is important to stress how enacting a specific reality and strengthening this through writing about it, also necessarily implies that I push other enactments out of sight (Law 2004: 144). The enactment of wilderness-nature works as an elision. While it orders relations in a specific way and makes certain things matter, it also negates other relations and ways of mattering. So when I write about this enactment I become complicit in effacing these other possible enactments of other realities.

Therefore, as an empirical tail on the story of turtle-human entanglements in Saving Turtles, I will here try to bring this thesis to a close with a new ontological opening; towards a practice that challenges the enactment of wilderness-nature. I started out this thesis with a focus on the political discussions surrounding sea-turtle hunting, where I argued that a dominant ontology which sees nature and culture as separate asserts itself over a less dominant ontology. However, as I argued above in relation to the precariousness of the enactment of wilderness-nature, to not give of the impression that this *modern* ontology inevitably works to undermine other ontologies, will here try to show empirically how this can also work the other way around, where a a timeless wilderness-nature is undermined by the very practice it renders

illegitimate.

As a form of active worlding(Tsing 2013), I here once again turn to the practice of hunting turtles. Although it seemed to be of little importance at the time of Matilda's release, the aboriginal self-governed shire of Yarrabah is Green Island's closest neighbour, situated on a peninsula just a few kilometres to the east of the island. At the beginning of my fieldwork, a video on youtube circulated among some of my informants. Seemingly shot by a tourist on Green Island, the video shows a group of aboriginal men in a motorboat that seem to be hunting for sea turtles on the reef that surrounds the island. In the video, a tourist starts shouting to the people in the boat; “murderers” whereby the people in the boat shout back; “...imperialists...you can't tell us what to do...this is our country”.

This seemingly small utterance where the word imperialist is used, and where the men in the boat state that “this is our country” has profound implications for how we should understand wilderness-nature. Hunting turtles in broad daylight next to a highly popular tourist destination can safely be called a political statement. More than that, it is a statement with onto-political effects which works to undermine the wilderness-nature that is enacted during a release. By stating that Green Island is “their country”, these men challenge the idea of wilderness-nature as a natural sphere separated from a human cultural sphere. For the hunters, the place where Matilda is released does not seem to be a clear-cut natural sphere, or a form of wilderness, but a place where you hunt.

How does this enact Green Island and sea turtles differently than the release of Matilda? I do not have a certain answer to that question as it should be noted that I was not present at the island when the video was shot and neither do I have much knowledge of aboriginal hunting. I did not speak to the hunters in the boat. I can only make a cautious, yet qualified guess that these men were from Yarrabah and possibly Gugandji aboriginal people, who enjoy hunting rights in accordance with Native Title Laws on Green Island and its surrounding reef. I might of course be wrong. As I was told by other aboriginal people in Cairns, people who claim falsely to be “traditional owners” often hunt illegally in the coastal areas surrounding Cairns. However, while I can never be certain in the conclusions I draw from the video, asking questions as to what an aboriginal enactment of Green Island and sea turtles might look like, is a form of active worlding that can make us see how reality can always be done differently. It becomes a productive way of multiplying possibilities as to what can be done besides wilderness-nature and to make evident what this enactment might efface.

In a way, contesting wilderness-nature through this form of world-making, ontological interference, puts me in a seemingly contradictory position. While I claim that wilderness-

nature should be respected as something materially real, as an enactment, I also want to take seriously how some practices might simultaneously undermine wilderness-nature and the boundary between nature and culture that it hinges on. I want to have my cake and eat it too. In fact, staying with this disjuncture is a good way to end the story about Saving Turtles while also making some concluding remarks about sea turtle conservation in Queensland in general. If wilderness, nature, or sea turtles can be enacted differently in ways that are seemingly incommensurable, then how should we understand conservation efforts directed at sea turtles?

As has been made clear through the empirical examples in this thesis, sea turtle conservation, here mostly in the form of rehabilitating turtles, should be seen as a genuinely heterogenous body of practices which shapes both humans and sea turtles ontologically. Ontologically then, there seem to be no "common ground", no given natural object towards which sea turtle conservation ultimately revolves. Sea turtles are being enacted multiply through different practices. Although some practices inherent to the environmental movement enacts sea turtles and nature as timeless, given, and separate from a human cultural sphere, for this to remain so, it must be re-iterated constantly through new enactments. While sea turtles might at times tentatively be enacted as a kind of common ground, where their ontologies are understood as fixed and given, in Saving Turtles, this quickly dissolve as practices necessary to rehabilitate turtles enacts them differently. This means that while the conservation efforts carried out by Saving Turtles aims towards a certain reality, a goal, in which rehabilitated turtles live in wilderness-nature, this necessarily involves a proliferation of other realities and ontologies that are enacted for this one reality to come into being.

So when a multiplicity of sometimes non-coherent worlds and turtle ontologies is a necessary ingredient for turtles to be released, then knowing this can be used to bridge the seeming incommensurability between the world of aboriginal hunters and conservationists who are opposed to the hunting of sea turtles. While I do not claim to have any final solution to the controversy and disagreements surrounding turtle hunting, taking this seriously means that no matter how different the ontologies or worlds that come out of different practices, there is always a possible that they can somehow be made to work together while still respecting and retaining the idiosyncrasies in each of them. My intention is here not to criticise the way my informants enact wilderness-nature but rather to note, that when seeing how conservation practices inevitably enact many different natures, then perhaps this realisation can be used to foster a sensitivity and perhaps a respect towards people with different practices who might enact other possible realities. Hopefully then, this can make apparent the multiplicity of ontologies we all deal with through our own daily practices.

References:

Asdal, Kristin (2008): Enacting things through numbers: Taking nature into account/ing. In *Geoforum* 39, 2008: 123–132.

Austin, J.L. (1962): *How to do Things With Words.* Cambridge: Harvard University Press.

Barad, Karen (2003): Posthumanist Performativity, Towards and Understanding of how matter comes to matter. In *Signs, Journal of Women in Culture and Society* Vol. 8 no. 3: 801-831.

jstor.org

Barad, Karen (2007): *Meeting the Universe Halfway.* London: Duke University Press.

Barad, Karen (2011): Nature's Queer Performativity. In *Critical Humanities and Social Sciences* Vol. 19 no 2, Spring/Summer 2011: 121-158. University of Nebraska Press.

Blaser, Mario (2009): The Threat of the Yrmo: The Political Ontology of a Sustainable Hunting Program. In *AMERICAN ANTHROPOLOGIST*, Vol. 111 Issue 1: 10–20.

Blaser, Mario (2013): Ontological Conflicts and the Stories of Peoples in Spite of Europe: Toward a Conversation on Political Ontology. In *Current Anthropology* Vol. 54 no. 5. October 2013.

Bubandt, N. and Otto T. (2010): Anthropology and the Predicaments of Holism. In Otto, Ton and Bubandt, Nils (eds.) *Experiments in Holism*: 47-66. Blackwell Publishing.

Cadena, Marisol de la(2010): INDIGENOUS COSMOPOLITICS IN THE ANDES: Conceptual Reflections beyond “Politics”. In *Cultural Anthropology* Vol. 25 Issue 2: 334–370. May 2010. DOI:10.1111/j.1548-1360.2010.01061.x

Callon, Michel (1986): Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (ed.): *Power, action and belief: a new sociology of knowledge?*, 1986. London, Routledge: 196-223.

Candea, Matei (2010): “I fell in love with Carlos the meerkat”: Engagement and detachment in human–animal relations. In AMERICAN ETHNOLOGIST Vol. 37, no. 2: 241–258.

Chrulew, Matthew (2012): Managing Love and Death at the Zoo: the Biopolitics of Endangered Species Presercvation. In *Austrlaian Humanities Review* 2010, Issue 50.

Cronon, William (1996): The Trouble with Wilderness, or Getting Back to the Wrong Nature. In William Cronon (ed.) *Uncommon Ground*; *Rethinking the Human Place in Nature*: 69–113. New York: W.W. Norton.

Deleuze, Gilles (2004): *Difference and Repetition*. The Athlone Press.

Deleuze, Gilles (1991): *Bergsonism.* New York: Zone Books.

Escobar, Arturo (2008): *Territories of Difference: Place, Movements, Life, Redes.* Duke University Press.

Foucault, Michel (2000): The birth of biopolitics. In P. Rabinow (ed.): *Ethics Subjectivity and Truth, vol. 1, The Essential Works of Foucault 1954–1984*, 1997. New York: The New Press: 73–79.

Foucault, Michel (2006): *Tingenes Orden.* Oslo: Spartacus Forlag.

Foucault, Michel (1995): Panopticism III. Discipline. In *Discipline & Punish: The Birth of the Prison* 1995: 195-228 translated from the French by Alan Sheridan © 1977. New York: Vintage Books. Downloaded at: http://dm.ncl.ac.uk/courseblog/files/2011/03/michel-foucault-panopticism.pdf on 15.05.2014.

Franklin, Adrian (2002): *Nature and Social Theory*. London: Sage.

Franklin, Adrian (2006a): *Animal Nation.* Sydney: UNSW Press.

Franklin, Adrian (2006b): Burning cities: a posthumanist account of Australians and eucalypts. *In Environment and Planning D: Society and Space* 2006, vol. 24: 555 -576.

Franklin, Adrian (2011): Performing Acclimatisation: The Agency of Trout Fishing in Postcolonial Australia. In *Ethnos*: *Journal of Anthropology*, 76:1, 19-40. DOI: 10.1080/00141844.2010.537759

Gad, Christopher, Jensen, Caspar Bruun og Winthereik, Brit Ross (2013) Praktisk Ontologi: Verdener i STS og antropologi. In *Tidsskriftet Antropologi*, Vol. 67: 81-100.

Haraway, Donna (1988): Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. In *Feminist Studies* Vol. 14, no. 3: 575-599. http://links.jstor.org

Haraway, Donna (1991): A Cyborg Manifesto. Science technology and socialist-feminism in the late twentieth century. New York: Routledge.

Haraway, Donna (2008): *When Species Meet.* Minneapolis: University of Minnesota Press.

Hayward, Eva (2010): Fingeryeyes: Impressions of Cup Corals. In *Cultural Anthropology* vol. 25(4): 577-599.

Henare, A., Holbraad, M. and Wastell, S (2007): Introduction: Thinking through things. In Amiria Henare, Martin Holbraad and Sari Wastell (eds.) *Thinking through things: Theorising artifacts ethnographically:* 1-31. London: Routledge.

Hobbs, Erin (2011): Performing Wilderness, Performing Difference: Schismogenesis in a Mining Dispute. In *Ethnos: Jounral of Anthropology* 76, 1: 109-129.

Ingold, Timothy (2011): *Being Alive: Essays on movement, knowledge and description.* New York: Routledge.

Jespersen, Astrid Pernille. Krogh, Morten Petersen. Ren, Carina. Sandberg, Marie (2012): Cultural Analysis as Intervention. In *Science Studies* 2012 Vol. 25 no. 1: 3-12. http://sciencetechnologystudies.org

Kalland, Arne (2009): *Unveiling the Whale: Discourses on Whales and Whaling.* New York: Berghan books.

Kirksey, Stefan and Kirksey, Eben (2010): THE EMERGENCE OF MULTISPECIES ETHNOGRPAHY. In *CULTURAL ANTHROPOLOGY*, Vol. 25, Issue 4: 545-576.

Kockelman, Paul (2013): The anthropology of an equation Sieves, spam filters, agentive algorithms, and ontologies of transformation. In 2013 | *HAU: Journal of Ethnographic Theory* 3 (3): 33–61.

Law, John (2004): *After Method: Mess in Social Science Research.* New York, Routledge.

Law, John and Urry, John (2005): Enacting the Social. In *Economy and Society*, 33: (3): 390-410.

Law, John (2007): Actor Network Theory and Material Semiotics.

http://www. heterogeneities.net/publications/Law2007ANTandMaterialSemiotics.pdf

Law, John and Mol Annemarie (2008): The Actor-Enacted: Cumbrian Sheep in 2001.

http://www.heterogeneities.net/publications/LawMol2008ActorEnacted.pdf

Law, John (2010): Notes on Fish, Pond and Theory.

http://www.sv.uio.no/sai/english/research/projects/newcomers/publications/working-papers-web/law-notes-on-fish-ponds-and-theory.pdf

Law, John (2011): What's Wrong With a One-World World?
http://www.heterogeneities.net/publications/Law2011WhatsWrongWithAOneWorldWorld.pdf

Law, John and Lien, Marianne (2012): Animal Architextures.
http://www.heterogeneities.net/papers.htm

Law J. Afdal G., Asdal K., Lin W., Moser I. and Singleton V. (2013): Modes of Syncretism:

notes on non-coherence. heterogeneities.net

Latour, Bruno(1993): *We have never been modern*.

Latour, Bruno (2004): *Politics of Nature*: *How to bring the sciences into democracy.* Harvard University Press.

Latour, Bruno (2005): *Reassembling the Social: An Introduction to Actor-Network Theory.* Oxford: Oxford University Press.

Leigh Star, Susan and Griesemer, James R. (1989): Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. In *Social Studies of Science* 1989 19: 387. DOI: 10.1177/030631289019003001

Mol, Annemarie (2002): *The Body Multiple.* Duke University Press.

Mol, Annermarie. Moser, Ingunn. Pols, Jeanette (2010): Care: putting practice into theory. In A.Mol, I.Moser, J.Pols (eds.): *Care in Practice: On Tinkering in Clinics, Homes and Farms.* Bielefelt: transcript Verlag.

Moser, Ingunn (2008): Making Alzheimer's disease matter. Enacting, interfering and doing politics of nature. In *Geoforum* 39, 2008: 98–110.

Munk and Abrahamsson (2012): Empiricist Interventions: Strategy And Tactics On The Ontopolitical Battlefield. In *Science Studies* 2012 Vol. 25 no. 1: 52-70. http://sciencetechnologystudies.org

Povinelli, Elizabeth (1995): Do Rocks Listen? The Cultural Politics of Apprehending Australian Aboriginal Labor. In *American Anthropologist*, *New Series*, Vol. 97, No. 3 (Sep., 1995): 505-518.

Povinelli, Elizabeth (2002): *The Cunning of Recognition: Indigenous Alterities and the Making of Australian Multiculturalism.* Duke University Press.

Paleček, Martin. Risjord, Mark (2013): Relativism and the Ontological Turn within Anthropology. In *Philosophy of the Social Sciences* 2013 Vol. 43, no. 3: 3-23. DOI: 10.1177/0048393112463335

Rabinow, Paul and Rose, Nikolas (2006): Biopower today. In *BioSocieties* 2006, 1: 195–217.

Rose, Deborah Bird and Davis Richard (2005): Preface. In Rose, Deborah Bird and Davis Richard(eds.): *Dislocating the frontier : essaying the mystique of the outback*: iii-iv. Canberra: ANU E Press.

Singleton, Vicky and Law, John (2011): Devices as Rituals. http://www.heterogeneities.net/publications/SingletonLaw2012DevicesAsRituals.pdf

Strathern, Marylin (1996): Cutting the Network. In *The Journal of the Royal Anthropological Institute* Vol. 2 no. 3. September 1996. http://www.jstor.org/stable/3034901

Srathern, Marylin (2004): *Partial Connections.* Oxford: AltaMira Press.

Strathern, Marylin (2011): Can one Rely on Knowledge? In Geissler, P.W. and Catherine Molyneux (eds.): *Evidence, Ethos and Experiment - The Anthropology and History of Medical Research in Africa: 57-76*. Oxford: Berghahn books.

Trigger, David (2008): 'Indigeneity, Ferality, and What "Belongs" in the Australian Bush: Aboriginal Responses to "Introduced" Animals and Plants in a Settler‐Descendant Society'. In *Journal of the Royal Anthropological Institute* 14: 628–46.

Thompson, Charis (2005): *Making Parents: The Ontological Choreography of Reproductive Technologies.* Cambridge: MIT Press.

Tsing, Anna Lowenhaupt (2012): Unruly Edges: Mushrooms as Companion Species. In *Environmental Humanities*, 2012 1:141-154.

Tsing, Anna Lowenhaupt (2010): Wordling the Matsutake Diaspora. In Otto, Ton and Bubandt, Nils (eds.) *Experiments in Holism*: 47-66. Blackwell Publishing.

Tsing, Anna Lowenhaupt (2013): More-than-Human Sociality: A Call for Critical Description. In Kirsten Hastrup (ed.) *Anthropology and Nature*: 27-43. New York: Routledge.

Verran, Helen (2001): *Science and an African Logic.* Chicago: The University of Chicago Press.

Warren, Charles (2007): Perspectives on the `alien' versus `native' species debate: a critique of concepts, language and practice. In *Progress in Human Geography* August 2007 31: 427-446.

Whintereik, Britt Ross and Verran, Helen (2012): Ethnographic Stories as Generalizations That Intervene. In In *Science Studies* 2012 Vol. 25 no. 1: 37-51. http://sciencetechnologystudies.org

Wolfe, Cary (2010): *What is Post-humanism.* Minneapolis: University of Minnesota Press.